LG
Life's Good

LG G Flex

User Guide

All screen shots in this guide are simulated.
Actual displays and the color of the phone may vary.
Some of the contents in this manual may differ from your phone depending on the software of the phone or your service provider.

MFL68086801 (1.0)

BC

www.lg.com

LIMITED WARRANTY STATEMENT

1. WHAT THIS WARRANTY COVERS :

LG offers you a limited warranty that the enclosed subscriber unit and its enclosed accessories will be free from defects in material and workmanship, according to the following terms and conditions:

1. The limited warranty for the product extends for TWELVE (12) MONTHS beginning on the date of purchase of the product with valid proof of purchase, or absent valid proof of purchase, FIFTEEN (15) MONTHS from date of manufacture as determined by the unit's manufacture date code.

2. The limited warranty extends only to the original purchaser of the product and is not assignable or transferable to any subsequent purchaser/end user.

3. This warranty is good only to the original purchaser of the product during the warranty period as long as it is in the U.S, including Alaska, Hawaii, U.S. Territories and Canada.

4. The external housing and cosmetic parts shall be free of defects at the time of shipment and, therefore, shall not be covered under these limited warranty terms.

5. Upon request from LG, the consumer must provide information to reasonably prove the date of purchase.

6. The customer shall bear the cost of shipping the product to the Customer Service Department of LG. LG shall bear the cost of shipping the product back to the consumer after the completion of service under this limited warranty.

2. WHAT THIS WARRANTY DOES NOT COVER :

1. Defects or damages resulting from use of the product in other than its normal and customary manner.

2. Defects or damages from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of LG, including damage caused by shipping, blown fuses, spills of food or liquid.

3. Breakage or damage to antennas unless caused directly by defects in material or workmanship.

4. That the Customer Service Department at LG was not notified by consumer of the alleged defect or malfunction of the product during the applicable limited warranty period.

5. Products which have had the serial number removed or made illegible.

6. This limited warranty is in lieu of all other warranties, express or implied either in fact or by operations of law, statutory or otherwise, including, but not limited to any implied warranty of marketability or fitness for a particular use.

7. Damage resulting from use of non-LG approved accessories.

8. All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal customer use.

9. Products operated outside published maximum ratings.

10. Products used or obtained in a rental program.

11. Consumables (such as fuses).

3. WHAT LG WILL DO:

LG will, at its sole discretion, either repair, replace or refund the purchase price of any unit that does not conform to this limited warranty. LG may choose at its discretion to use functionally equivalent reconditioned, refurbished or new units or parts or any units. In addition, LG will not re-install or back-up any data, applications or software that you have added to your phone. It is therefore recommended that you back-up any such data or information prior to sending the unit to LG to avoid the permanent loss of such information.

4. STATE LAW RIGHTS :

No other ex warranty is applicable to this product. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. LG INFOCOMM INC. SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY APPLICABLE TO THIS PRODUCT.

Some states do not allow the exclusive of limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

5. HOW TO GET WARRANTY SERVICE :

To obtain warranty service, please call or fax to the following telephone numbers from anywhere in the continental United States:

Tel. 1-800-793-8896 or Fax. 1-800-448-4026

Or visit www.lg.com.
Correspondence may also be mailed to:

LG Electronics MobileComm U.S.A., Inc.

201 James Record Road Huntsville, AL 35824

DO NOT RETURN YOUR PRODUCT TO THE ABOVE ADDRESS.
Please call or write for the location of the LG authorized service center nearest you and for the procedures for obtaining warranty claims.

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Important Notice

Please check to see if any problems you have encountered with your phone are described in this section before taking the phone in for service or calling a service representative.

1. Phone Memory

In order to make more memory available, you will have to manage your applications and delete some data, such as applications or messages.

Managing Applications

1 From the Home screen, tap the **Menu Key** and tap **All settings** > **General** tab > **Apps**.

2 Tap one of the available tabs at the top of the screen and select the application you want to uninstall.

3 Tap **Uninstall** and then tap **OK** to confirm that you want to uninstall the desired application.

2. Optimizing Battery Life

You can extend your battery's life between charges by turning off features that you don't need to run constantly in the background. You can also monitor how applications and system resources consume battery power.

To extend the life of your battery

- Turn off radio communications that you aren't using, such as Wi-Fi, Bluetooth, or GPS.
- Wi-Fi will be set to On the first time you use your newly purchased phone.
- Lower screen brightness and set a shorter screen timeout.
- Turn off automatic syncing for Gmail, Calendar, Contacts, and other applications.
- Some applications you have downloaded may cause your battery power to be reduced.
- While using downloaded applications, check the battery charge level.

To view the battery charge level

1 From the Home screen, tap the **Menu Key** and tap **All settings** > **General** tab > **Battery**.

2 The battery status (charging or discharging) and level are displayed on the screen.

To monitor and control what uses the battery

1 From the Home screen, tap the **Menu Key** and tap **All settings** > **General** tab > **Battery** .

2 Tap the battery icon.

3 A list all of the applications or services using battery power from the greatest amount of energy used to the least amount. You can also use it to turn off applications or services if they are consuming too much power. Tap any of the listed items for more options.

3. Installing an Open Source Operating System

Installing an open source operating system on your phone and not using the operating system provided by the manufacturer can cause your phone to malfunction.

Warning

- If you install and use an operating system other than the one provided by the manufacturer, your phone is no longer covered by the warranty.
- To protect your phone and personal data, download applications only from trusted sources, such as Play Store. If some applications are not properly installed on your phone, your phone may not work properly- or serious errors may occur. You will need to uninstall those applications and all of its data and settings from the phone.

4. Using a Screen Lock

Set a screen lock to secure your phone. To set the screen lock, follow the process below.

From the Home screen, tap the **Menu Key** , tap **Lock screen settings** > **Select screen lock** and select a desired screen lock from **Swipe, Face Unlock**, **Pattern**, **PIN** and **Password**.

NOTE

- In case that you have trouble with Face Unlock, you can unlock the screen a Backup Pattern or PIN.

Warning

- Take precautions when using an unlock Pattern, PIN, or Password. It is very important that you remember the screen unlock information you set. You are allowed 5 attempts to enter your screen unlock information. If you used up all 5 opportunities, you will have to wait 30 seconds to attempt unlocking the phone again.

When you can't recall your Unlock Pattern, PIN, or Password:

If you logged into a Google account on the phone and failed to use the correct pattern 5 times, tap **Forgot pattern?** You will be required to sign in with your Google account and prompted to create a new unlock pattern.

If you have set a backup PIN, you can unlock the screen with keying in the backup PIN.

If you haven't created a Google account on the phone and you forgot your PIN, Password, and the backup PIN, you need to perform a hard reset.

Caution

- If you perform a hard reset, all user applications and user data will be deleted. Please remember to back up any important data before performing a hard reset.

Read ALL steps before attempting.

1 Turn the phone off.

2 Press and hold the following keys at the same time: **Volume Down Key** + **Power/Lock Key** on the back of the phone.

3 Release the **Power/Lock Key** only when the LG logo is displayed, then immediately press and hold the **Power/Lock Key** again.

4 Release all keys when the Factory hard reset screen is displayed.

5 Press the **Volume Down Key** to scroll to Yes, then press the **Power/Lock Key** to confirm.

- To cancel the Factory hard reset, select **No (Exit)**.

6 Press the **Volume Down Key** to scroll to **Yes**, then press the **Power/Lock Key** to confirm once more.

7 Your device will perform a hard reset.

5. Using Safe Mode

Using Safe mode

To recover your phone when malfunctioning.

1 Turn off your phone and reboot. When you see the AT&T booting animation press and hold the **Volume Down Key** until you see the Home screen.

OR

While the phone is on, press and hold the **Power/Lock Key** until the Phone

options menu is displayed. Then touch and hold **Power off** and tap **OK**.
Your Home screen will then be displayed with the words "Safe mode" in lower left corner.

2 From the Home screen, tap the **Menu Key** and tap **All settings** > **General** tab > **Apps**.

3 Tap one of the available tabs at the top of the screen and select the application you wish to uninstall.

4 Tap **Uninstall** and **OK** to confirm.

5 After uninstalling the application, reboot your phone.

6. Connecting your phone to a computer via USB

1 Use the USB cable that was provided with your phone to connect the phone to a USB port on your computer. You'll receive a notification that the USB is connected and can see USB connection mode screen.

2 Tap **Media sync (MTP)** or **Send images (PTP)** to confirm that you want to transfer files between your phone and the computer.

When the phone is connected as USB storage, you receive a notification. Your phone is recognized as a device on your computer. You can now copy files to and from the phone.

TIP

- You can access your phone's storages while connected as USB storage. So you cannot use applications that rely on the storages, such as Music.

7. Unlock screen when using data connection

Your screen will go dark if untouched for a period of time when using a data connection. To turn on your LCD screen, press the **Power/Lock Key** . To change the length of time the screen takes to turn off, tap the **Menu Key** > **All settings** > **Display** tab > **Screen timeout** and select the desired amount.

8. Internal antenna

Please hold the mobile phone straight up as a regular phone.

While making/receiving calls or sending/receiving data, try to avoid holding the lower part of the phone where the antenna is located. It may affect call quality.

9. When the screen freezes

If the phone does not respond to user input or the screen freezes:
Press and hold the **Power/Lock Key** for 10 seconds to reboot it.

10. Do not connect your phone when you power on/off your PC

Make sure to disconnect your phone from the PC when powering your PC on or off as it might result in PC errors.

11. Hardware key control mode

If your phone display is damaged or broken, you can answer an incoming call, end a call, or turn off an alarm using the hardware keys.

1 Turn your phone off.

2 Press and hold the **Power/Lock Key** and the **Volume Keys** at the same time for more than 6 seconds to enter the Hardware key control mode.

3 Press the **Volume Keys** to scroll to the desired option, then press the **Power/Lock Key** to confirm.

- **Answer a call:** Press the **Volume Keys** at the same time.
- **End a call:** Press the **Power/Lock Key** during a call.
- **Stop an alarm:** When an alarm rings, press and hold the **Volume Up Key** or **Volume Down Key** to stop the alarm.

NOTE

- If you use your phone with a broken display glass, your phone can break even more or you can be injured. Make sure to visit the LG authorized service center to get your phone repaired.

Your Phone

To turn on the phone, press and hold the **Power/Lock Key** on the back side of the phone for 1.5 seconds.

To turn off the phone, press the **Power/Lock Key** on the back side of the phone for 1.5 seconds and tap **Power off** and **OK** to confirm.

Front view

Front Camera Lens

- Use to take a picture of yourself or to video chat on supported applications.

Quick Keys

- Gives you quick access to your most used applications.
- To add an icon, drag and drop it in the bar.
- To remove an icon, touch and hold it and remove it from the bar.

Back Key

- Returns to the previous screen.
- Closes pop-up menus and dialog boxes.

Home Key

- Returns to the Home screen from any screen.
- Touch and hold to access your most recently used applications.

Earpiece

Notification LED

Proximity Sensor

- Senses proximity toward other objects, such as your head during a call, so that you do not accidentally activate unwanted features.

Menu Key

- Displays available options for the current screen or application.

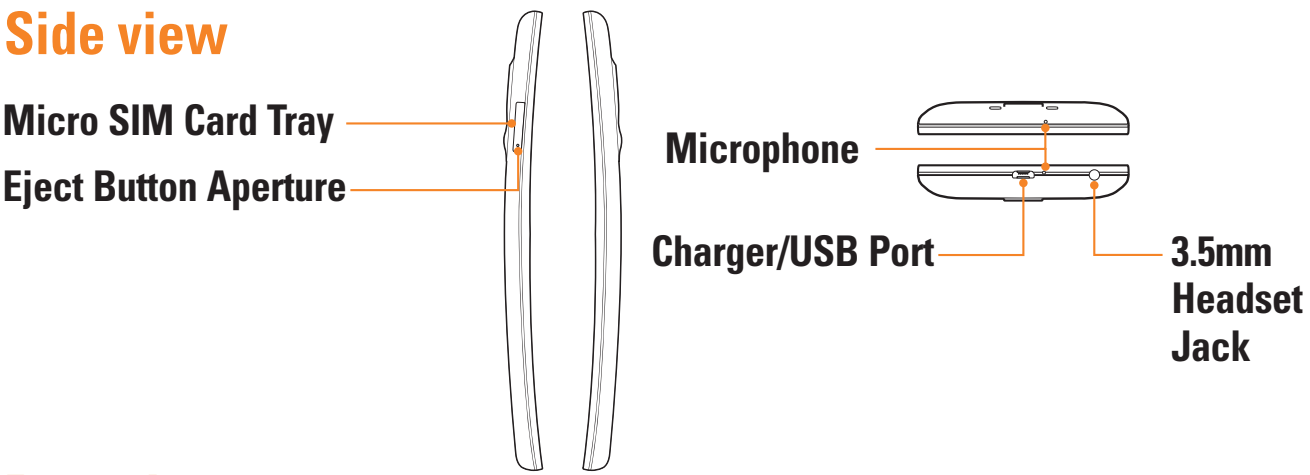
Warning

- Placing a heavy object on the phone or sitting on it can damage its LCD and touch screen functionalities. Do not cover the LCD's proximity sensor with a protective film. This can cause the sensor to malfunction.

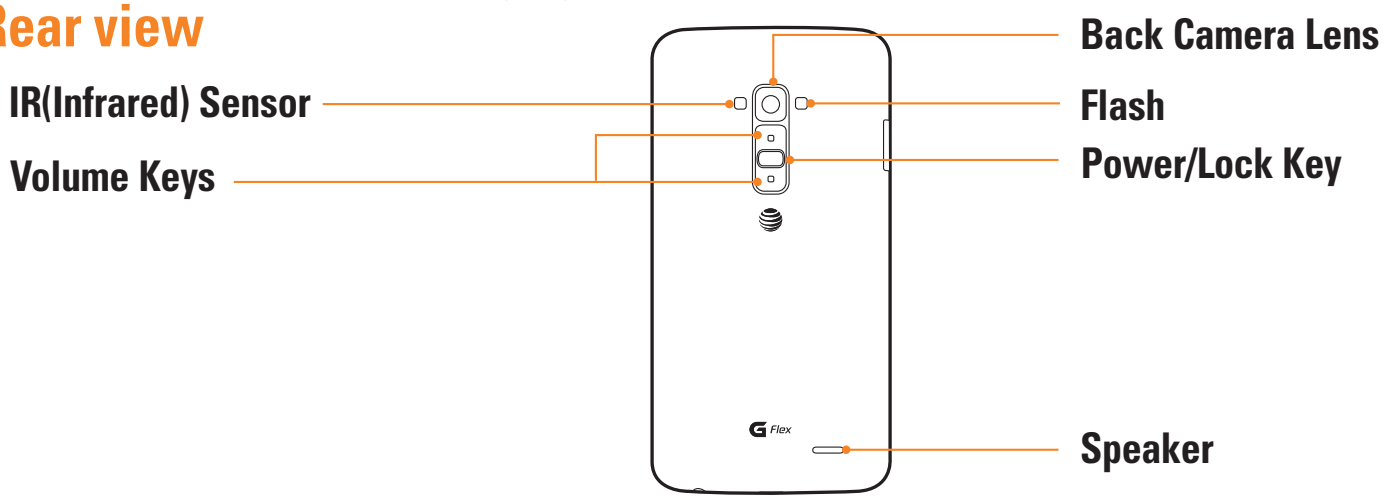
TIP

- Tap the **Menu Key** whenever you open an application to check what options are available.

Side view



Rear view



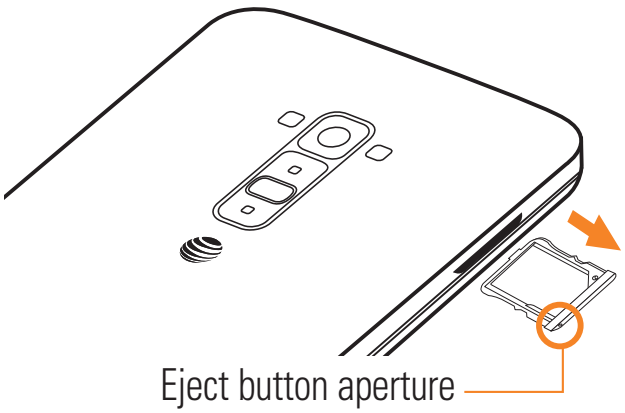
NOTE

- The NFC antenna for this model is on the back cover.
- The back cover of this product applies a "self-healing" technology, which self-repairs minor scratches in just a few minutes. Minor scratches are those caused by ordinary and normal use of the phone. Scratches caused by abrasive surface, misuse, including but not limited to intentional scratches, and damages caused by a fall or dropping the product, may not disappear. The "self-healing" results may vary depending on the extent of the damage as well as other conditions. Any warranty on the "self-healing" is hereby expressly excluded.

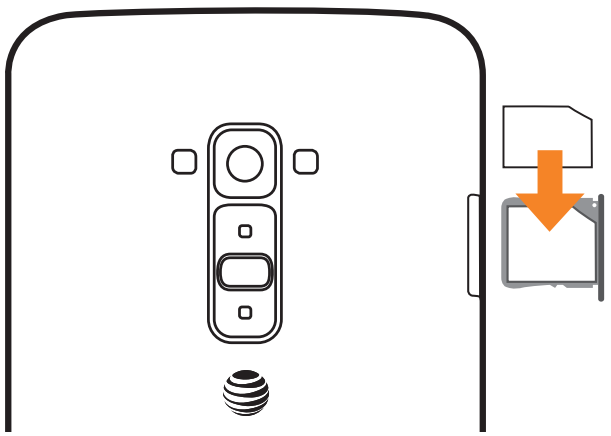
Installing the micro SIM card

Before you can start exploring your new phone, you'll need to set it up. The micro SIM card tray eject button is a small round aperture on the tray door. To install a new micro SIM card:

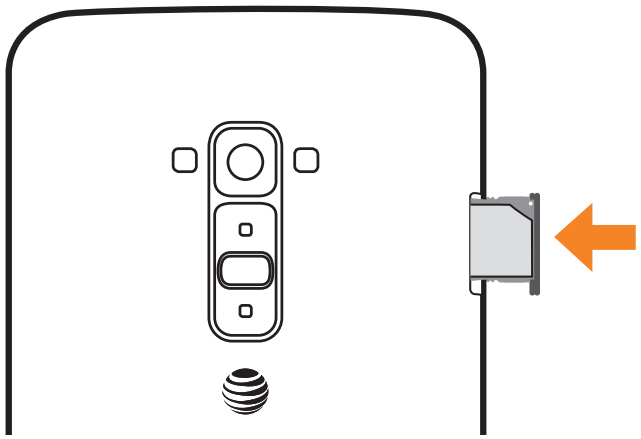
1 Insert the micro SIM ejection tool that comes with the phone (or a thin pin) into the eject button aperture and push gently but firmly until the tray pops out. Then pull the micro SIM card tray.



2 Position the micro SIM card into the tray (as shown in the above image).



3 Insert the micro SIM card tray.



NOTE

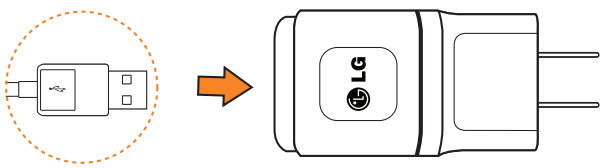
- Turn the phone off before inserting or removing the micro SIM card.

Warning

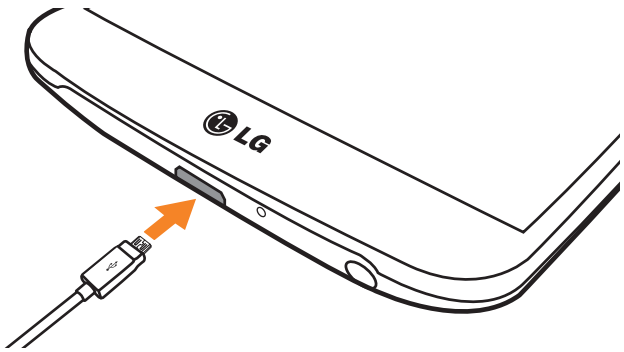
- Always be careful when removing the micro SIM card tray. The ejection tool is very sharp.

Charging your phone

1 Connect the wall adapter and USB cable as shown below. The USB symbol on the USB cable should face toward you.



2 Plug the USB cable (as shown below) into the phone's Charger/Accessory Port. Make sure the USB symbol is facing upwards.



Always unplug the charger from the wall socket after the phone is fully charged to save unnecessary power consumption of the charger.

NOTE

- The battery must be fully charged initially to improve battery lifetime.
- Your phone has an internal antenna. Be careful not to scratch or damage this rear area, as that will cause loss of performance.
- When the battery becomes fully discharged and you connect the phone to a charger, the Notification LED lights will blink. This is normal operation for a completely discharged battery to prevent overflowing current because the phone is designed to provide reasonable protection against damage to the battery. Once the battery has enough charge, the screen will turn on and display a battery image.
- **Non-Removable Battery**
  Your phone has an internal, rechargeable battery that should be replaced only by LG or an authorized LG repair center. You should never try to open or take apart this phone yourself. Opening the phone can cause damage that will void your warranty.

Warning

- Use only LG-approved chargers, batteries and cables. When using unapproved chargers or cables, it may cause slow charging. Or, unapproved chargers or cables can cause the battery to explode or damage the device, which are not covered by the warranty.
- Charging may be interrupted when you use a USB hub, which is not retained rated voltage.

Switching between and exiting applications

Multi-tasking is easy with Android because open applications keep running even when you open another application. There is no need to quit an application before opening another. Use and switch among several open applications. Android manages each application, stopping and starting them as needed, to ensure that idle applications don't consume resources unnecessarily.

Switching between applications

- Touch and hold the **Home Key** . A list of recently used applications will be displayed. Then tap the application you want to access.
- To remove an application from the list, swipe the app preview to the left or right.

To stop/exit an application

1 From the Home screen, tap the **Menu Key** and tap **All settings** > **General** tab > **Apps**.

2 Tap one of the tabs at the top of the screen, choose the desired application and tap **Force stop** (or **Stop**) to stop the application.

Your Home screen

Touch screen tips

With the touch of your finger, you can access available applications, make menu selections, and access data saved to your phone. The following terms are used for describing the different available actions using the touchscreen:

Tap - A single finger tap selects items, links, shortcuts and letters on the on-screen keyboard.

Touch and hold - Touch and hold an item on the screen by touching it and not lifting your finger until an action occurs. For example, to open a contact's available options, touch and hold the contact in the Contacts list until the context menu opens.

Drag - Touch and hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. You can drag items on the Home screen to reposition them.

Swipe or slide - To swipe or slide, quickly move your finger across the surface of the screen, without pausing when you first touch it (so you don't drag an item instead). For example, you can slide the screen up or down to scroll through a list, or browse through the different Home screens by swiping from left to right (and vice versa).

Double-tap - Double-tap to zoom on a Web page or a map. For example, quickly double-tap a section of a Web page to adjust that section to fit the width of the screen. You can also double-tap to zoom in and out when using Maps.

Pinch-to-Zoom - Use your index finger and thumb in a pinch or spread motion to zoom in or out when using the browser, Maps, Camera, or browsing pictures.

Rotate the screen - From many applications and menus, the orientation of the screen adjusts to the device's physical orientation.

NOTE

- To select an item, tap the center of the icon.
- Do not to press too hard; the touch screen is sensitive enough to pick up a light, firm touch.
- Use the tip of your finger to tap the option you want. Be careful not to tap any other keys or icons.

Proximity sensor

When receiving and making calls, this sensor automatically turns the backlight off and locks the touch keypad by sensing when the phone is near your ear. This extends battery life and prevents the touch keypad from activating unintentionally during calls.

Lock your phone

When you are not using the phone, press the **Power/Lock Key** to lock your phone. This helps prevent accidental presses and saves battery power.

Also, if you do not use the phone for a while, the Home screen, or other screen you are viewing, is automatically replaced with the lock screen after 30 seconds (depending on the screen timeout settings) of inactivity to conserve the battery and prevent pocket dialing.

To wake up your phone, press the **Power/Lock Key**. The lock screen will appear. Swipe the screen in any direction to unlock. The last screen you were working on opens.

NOTE

- The automatic screen timeout can be configured manually in Settings. To change it, tap the **Menu Key** > **All settings** > **Display** tab > **Screen timeout**.
- If there are any programs running when you lock the phone, they may still be running in lock mode. It is recommended that you exit all programs before entering the lock mode to avoid unnecessary charges (e.g., phone call, web access and data communications).

KnockON

The KnockON feature allows you to double-tap the screen to easily turn it on or off. You can disable this feature in the Gestures settings.

To turn the screen on

1. Double-tap the center of the Lock screen to turn the screen on.
2. Unlock the screen or access any of the available shortcuts or widgets (if available).

To turn the screen off

1. Double-tap an empty are of the Home screen or the Status Bar.
2. The screen will turn off.

NOTE

- Tap on the center area of the screen. If you tap on the bottom or the top area, the recognition rate may decrease.
- To activate or deactivate the feature, tap > > **All settings** > **General** tab > **Gestures** > **Screen on/off**.

Quick Switch to Silent/Vibrate Mode

To quickly set your phone to silent or vibrate mode, slide the Status Bar down and tap until or appears.

Home Screen Overview

The main Home screen is the starting point for many applications and functions, and it allows you to add items like application icons, shortcuts, folders or widgets to give you instant access to information and applications. This is the default page and accessible from any menu by tapping the **Home Key** .

On your Home screen, you can view menu icons at the bottom of the screen. Menu icons provide easy and one-touch access to the functions you use the most.

Navigating Through the Home Screen Canvases

Your phone has several Home screen canvases. If you like, you can place different applications on each of the Home screen canvases.

From the main Home screen canvas, swipe the screen with your finger in either direction. The main Home screen canvas is located in the middle. To add more canvases, pinch in on the Home screen and tap ✛.

You can also customize each canvas with shortcuts, folders, and widgets.

Navigating Through the Sub-Menus

Sub-menus are available when you are at any Home screen or have selected a feature or application such as Phone, Contacts, Messaging or Browser.

1. Touch the **Menu Key** . A sub-menu displays at the bottom of the phone screen.
2. Tap an option.

Customizing your Home screen

You can customize your Home screen by adding quick access items, such as shortcuts to an application, widgets, or changing the wallpaper.

- **Apps**: Add shortcuts to applications on the Home screen.
- **Widgets**: Add dynamically updating widgets to your Home screen to allow quick access to applications without opening the full application

- **Wallpapers**: Change the Home screen wallpaper.

To add shortcuts to apps or widgets on the Home screen:

1 Select a location (Home screen canvas) to add an item by swiping the Home screen from left to right or vice versa.

2 Touch and hold an empty part of the Home screen.

3 Tap the type of item you want to add on the screen: **Apps** or **Widgets**.

4 Tap the desired app or widget.

5 You will see a new icon on the Home screen. To place it on a different canvas, touch and hold it to drag it to the desired location and release your finger from the screen.

TIP

- To add a preloaded application or an application you have downloaded from Play Store to the Home screen, simply touch and hold the icon you want in the Apps screen and drag it to the desired Home screen canvas.

NOTE

- If there is no available space on a particular Home screen panel, you must delete or remove an item before you can add another item. In this case, you have the option of switching to another Home screen panel.

To delete an application icon from the Home screen, touch and hold the shortcut icon or widget you want to delete and drag to **Remove** at the top of the screen. When changes to , lift your finger.
You cannot delete the preloaded applications. (Only their icons can be deleted from the screen).

Customizing apps icons on the Home screen

You can create your own custom application icon(s) using the images in your Gallery.

1 Touch and hold an application icon until it's unlocked from its current position. Then drop it on the screen. The editing icon will appear in the upper right corner of the application.

NOTE

- If an icon you placed can be resized, you will see a blue box around the icon after you touch, hold and release it. Drag the edges of the box to resize it.

2 Tap the application icon.

3 Tap the icon design you want from the available **Theme icon** choices and change the size (if desired), then tap **OK**.

OR

Tap **Photo icon**, then tap **Add new**. Set the size for the icon, then tap **OK**. Select the image want to use for the application. Crop the image if necessary, then tap **OK**.

NOTE

- Your customized application icon(s) are only applied to icons on your Home screen. The Applications screen is not affected.
- Your custom photo icons are saved so you can easily select them for any of your icon images.

Creating Application Folders on the Home screen

You can create application folders to hold similar applications if you wish.

On the Home screen

1 Touch and hold an icon to unlock it from its positions. Then drag it over another icon and release it.

2 A folder will be created.

3 To rename the folder or change its color, open it and tap the folder name.

On the Apps screen

1 From the Home screen, tap the **Apps Key** to open the Apps screen.

2 Tap the **Menu Key** > **View apps by** > **User customized**.

NOTE

- A folder cannot be created when the apps are organized by Alphabetical order or Downloaded date.

3 Tap .

4 Touch and hold the desired icon to release it from its position.

5 Drag the icon over another icon and release it to create a folder.

Customizing the Apps screen

1 From the Home screen, tap the **Apps Key** .

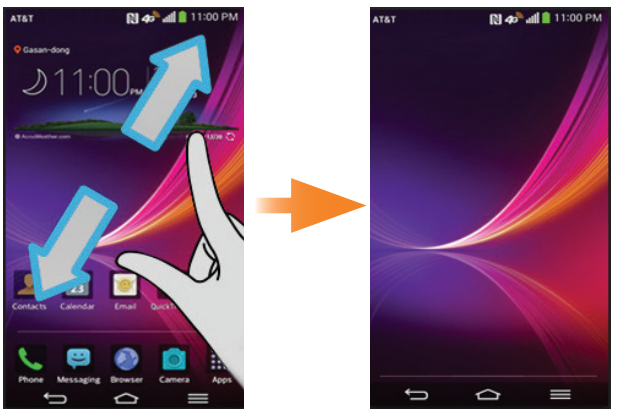
2 Tap the **Apps** tab at the top of the screen to go to the Apps screen, if it is not already selected.

3 Tap the **Menu Key** to access the following Applications screen options:

- **View apps by:** Tap to sort your applications in alphabetical order, by downloaded date, or user customized.
- **Show small/large icons:** Tap to change the application icons to either small or large, then tap **Yes** to set your choice.
- **App menu wallpaper:** Tap to change the wallpaper background. Scroll horizontally to view all of your choices, tap the one you want, then tap **Apply**.
- **Hide/Show apps:** Tap to set which application icons will be displayed in your Applications screen. Checkmark the icons you want to hide, then tap **OK**.

Home screen clean view

You can see the wallpaper without items on the Home screen by placing two fingerso on the screen and pinching out. Pinch in or tap the **Back Key** to see applications and widgets again.



Quick access

To view the quick access items, touch anywhere in the front key area and drag up. The following options are available: Voice Mate, Google Search, and QuickMemo.

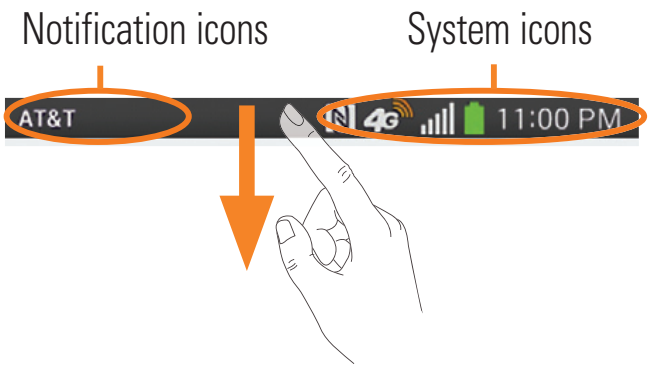
Notifications

Notifications alert you to the arrival of new messages, calendar events, and alarms, as well as to ongoing events, such as video downloads. From the Notifications panel, you can view your phone's current status and pending notifications.

When a notification arrives, its icon appears at the top of the screen. Icons for pending notifications appear on the left, and system icons showing things like Wi-Fi or battery strength on the right.

NOTE

- The available options may vary depending on the region or service provider.



Accessing notifications

Swipe the Status Bar down to open the Notifications panel to access notifications. To close the Notifications panel, swipe the bar at the bottom of the screen upwards.

Quick Settings

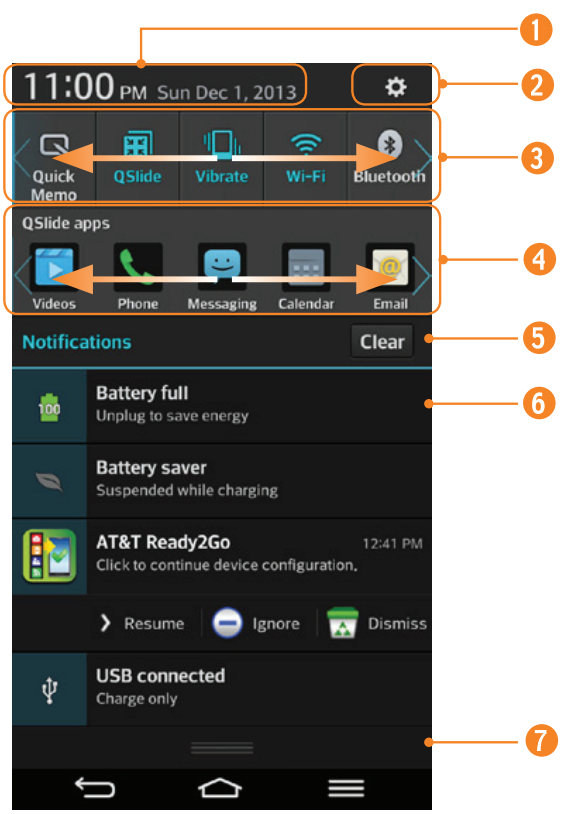
Use the Quick Settings to easily toggle function settings like Wi-Fi, manage display brightness and more. To access the Quick Settings, swipe the Status Bar down to open the Notifications panel and select any of the available Quick Setting apps at the top of the screen.

NOTE

- Touch and hold an icon on the Quick Settings menu to go directly to that setting's menu screen.

Opening the notifications panel

Swipe down from the status bar to open the notifications panel.



1. Tap to quickly access the **Date & time settings.**
2. **Settings**
   Tap to open the **Settings** menu.
3. **Quick Settings Area**
   Tap each quick settings key to turn it on/off. Touch and hold the key to access the settings menu of the function. To see more options, swipe left or right. Tap to remove, add, or rearrange the options.
4. **QSlide Apps**
   Tap a QSlide app to open as a small window on your screen. Tap to remove, add, or rearrange QSlide apps.
5. Tap to clear all the notifications.
6. **Notifications**
   The current notifications are listed, each with a brief description. Tap a notification to view it.
7. To close the notifications panel, touch and drag the tab toward the top of the screen.

Notification icons on the Status Bar

Notification icons appear on the Status Bar at the top of the screen to report missed calls, new messages, calendar events, device status and more.

The icons listed in the table below are some of the most common ones.

Icon	Description
	No SIM card inserted
	No network signal available
	Airplane mode is on
	Connected to a Wi-Fi network
	Wired headset connected
	Call in progress
	Missed call
	Bluetooth is on
	NFC is on
	System warning
	An alarm is set
	New voicemail available

Icon	Description
	Ringer is silenced
	Vibrate mode is on
	Battery fully charged
	Battery is charging
	Phone is connected to PC via USB cable
	Downloading data
	Uploading data
	GPS is on
	Receiving location data from GPS
	Data is synchronizing
	New Gmail message available
	New Hangouts message available

Icon	Description
	New text or multimedia message
	A song is currently playing
	Mobile hotspot is active
	Choose input method
	DLNA content share
	DLNA music playing

On-screen Keyboard

You can enter text using the on-screen keyboard. The on-screen keyboard displays automatically on the screen when you need to enter text. To manually display the keyboard, simply tap a text field where you want to enter text.

There are three types of keyboards that you can use: **Android keyboard (AOSP)**, **Google voice typing** and **LG Keyboard**.

To select the keyboard:

1 From the Home screen, tap the **Menu Key** > **All settings** > **General** tab > **Language & input** > **Default** (under the Keyboard & Unput Methods section).

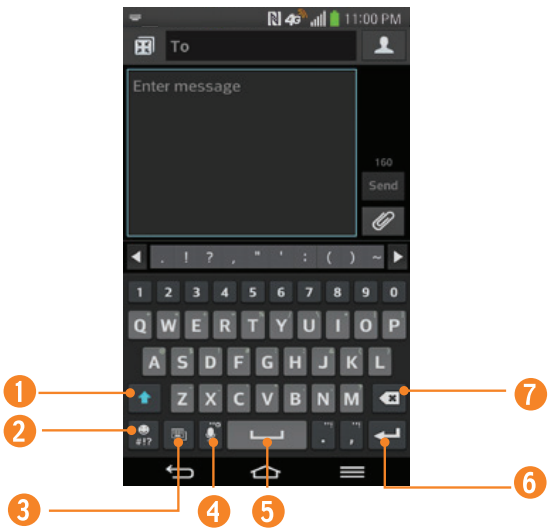
2 Select the default keyboard between **Android keyboard (AOSP)** and **LG Keyboard**.

OR

1 While entering text, drag the Status Bar down and tap **Choose input method**.

2 Select the desired input method from **Android keyboard (AOSP)**, **Google voice typing** or **LG Keyboard**. (default).

LG keyboard - Letters Entry

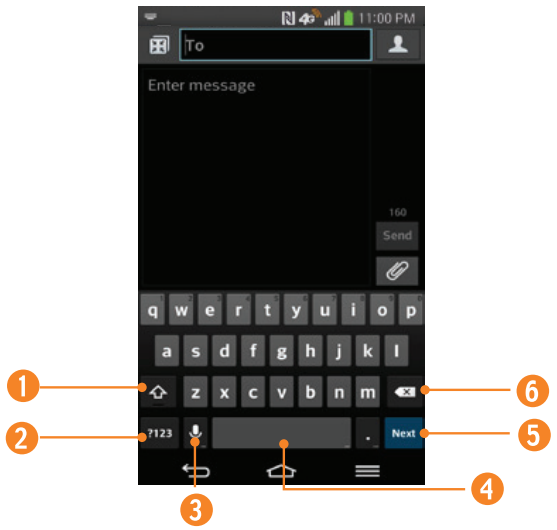


1. **Shift Key** - Tap once to capitalize the next letter you type. Double-tap for all caps.
2. **Symbols Key** - Tap to change input to number and symbol entry.
3. **Keyboard Style/Language Key** - Tap to change the keyboard style or input language.
4. **Voice input/Handwriting/Clip Tray/ Settings Key** - Tap to enter text by voice. Touch and hold to enter text by handwriting, enter items copied to the Clip Tray, or access the keyboard settings. The default icon displayed is Voice input.
5. **Space Key** - Tap to enter a space.
6. **Enter Key** - Tap to move the cursor to the next line.
7. **Delete Key** - Tap to delete characters to the left of the cursor.

LG keyboard - Numbers and Symbols Entry

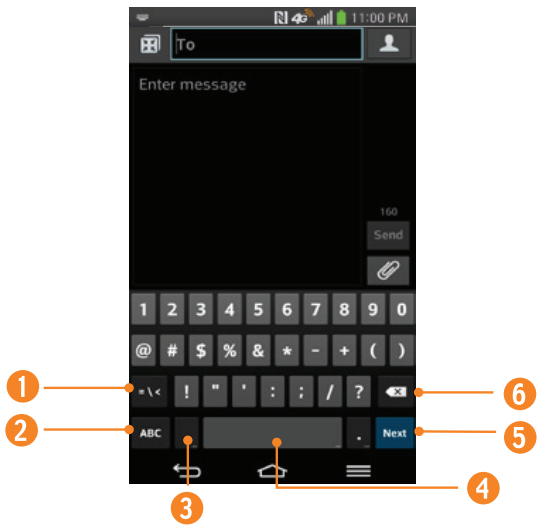
1. **Letters Key** - Tap to change input to letters entry.
2. **Emoji Mode** - Tap to enter emoji characters.
3. **Space Key** - Tap to enter a space.
4. **Enter Key** - Tap to move the cursor to the next line.
5. **Delete Key** - Tap to delete characters to the left of the cursor.

Android keyboard (AOSP) - Letters Entry



1. **Shift Key** - Tap once to capitalize the next letter you type. Double-tap for all caps.
2. **Number and Symbols Key** - Tap to change input to number and symbol entry.
3. **Voice to Text/Settings Key** - Tap to enter text by voice. Touch and hold to set various keyboard settings.
4. **Space Key** - Tap to enter a space. Touch and hold to change your input method.
5. **Enter Key** - Tap to move the cursor to the next line.
6. **Delete Key** - Tap to delete characters to the left of the cursor.

Android keyboard (AOSP) - Numbers and Symbols Entry



1. **Alt Key** - Tap to enter additional symbols.
2. **Letters Key** - Tap to change input to letters entry.
3. **Settings Key** - Touch and hold to set various Android keyboard settings.
4. **Space Key** - Tap to enter a space. Touch and hold to change your input method.
5. **Enter Key** - Tap to move the cursor to the next line.
6. **Delete Key** - Tap to delete characters to the left of the cursor.

123 Mode

This mode allows you to enter numbers in a text message (a telephone number, for example) more quickly. Tap the keys corresponding to the required digits before manually switching back to the appropriate text entry mode by tapping on the LG Keyboard or on the Android keyboard.

Entering Special Characters

The on-screen keyboard allows you to enter special characters (e.g., "á").

To enter a special character, touch and hold the desired key (touch the "a" key for example).

After the special character appears, slide your finger over it and lift it off it to enter it.

NOTE

- A symbol at the top (or bottom) right corner of a key indicates that additional characters are available for that key.

Using Clip Tray

Easily access the contents you stored in the Clip Tray whenever and wherever you want. You can copy images or texts and keep them in the Clip Tray. Then, you can paste them whenever and wherever you want.

1. Touch and hold text and images while eding them and tap **Clip Tray**.
2. Touch and hold the text input field and select **Clip Tray**. You can also access the Clip Tray by touching and holding > .

NOTE

- You can save up to 20 items in the Clip Tray.
- Touch and hold an item in the Clip Tray and tap to delete it.
- This function may not be supported in downloaded apps.

Text Link

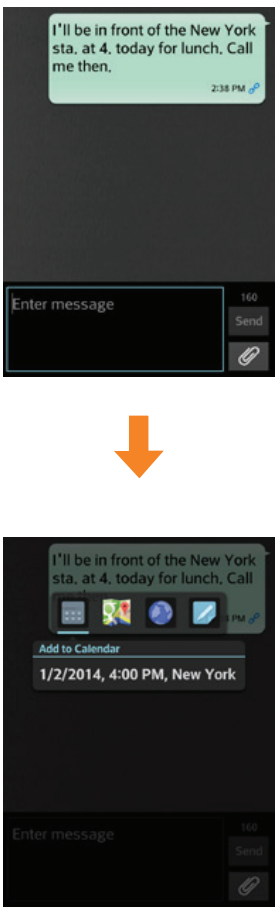
Text Link recommends apps related to text in messages or other selected text. It connects directly to the Calendar, Contacts, Phone, Messaging, Email, Browser, Maps, YouTube, Calculator, and more.

NOTE

- If your phone is set to English or Korean, Text Link performs more functions than in other language settings.
- Overly long sentences are subject to limitations.
- Arithmetic operators (such as +, -, * and /) start the Calculator.

- If Text Link is not linked to an app, the Browser can be used for searching.

To use Text Link:



▶ Tap a message bubble with the icon. Text Link recommends apps related to the message content.

Plug & Pop

Plug & Pop allows you to quickly choose apps to use when plugging in an earphone or On-the-Go device, such as a mouse or keyboard.

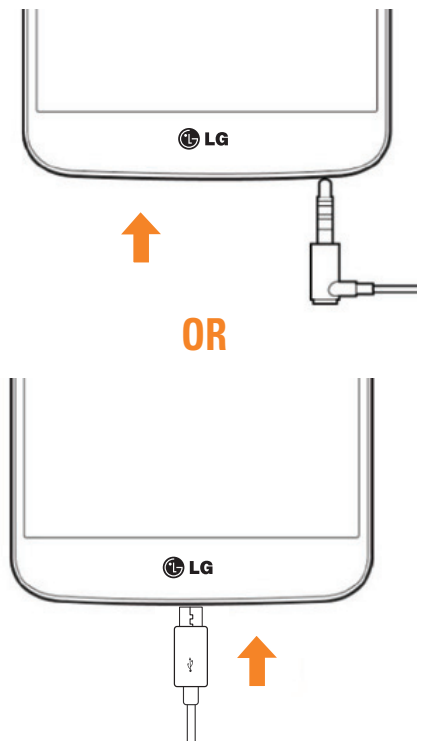
1 Plug in earphone or OTG (On-the-Go) device (i.e., mouse, keyboard, etc.).

2 The applications panel will display and you can select an app to run.

NOTE

- You can edit the applications to display on the panel and set not to show the applications panel.

▶ From the Home screen, tap the **Menu Key** > **All settings** > **General tab** > **Accessory** > **USB Storage** or **Earphone.**



Google Account Setup

The first time you open a Google application on your phone, you will be required to sign in with your existing Google account. If you do not have a Google account, you will be prompted to create one.

Creating your Google account

1. From the Home screen, tap the **Apps Key** .
2. Tap **Settings** > **General** tab > **Accounts & sync** > **Add account** > **Google** > **New**.
3. Enter your username and tap . Your phone will communicate with Google servers and check for username availability.
4. Enter and re-enter your password. Then follow the instructions and enter the required and optional information about the account. Wait while the server creates your account.

Signing into your Google account

1. From the Home screen, tap the **Apps Key** .
2. Tap **Settings** > **General** tab > **Accounts & sync** > **Add account** > **Google** > **Existing**.
3. Enter your email and password and tap .
4. Read the disclaimer about signing in and checkmark if you want to keep updated with news and offers from Google Play. Then tap **OK**.
5. After signing in, you can use Gmail and take advantage of Google services on your phone.
6. Once you have set up your Google account, your phone will be automatically synchronized with your Google account on the web. (Depending on your synchronization settings.)

After signing in, your phone will sync with your Google services, such as Gmail, Contacts, Google Calendar, and Picasa photo albums. You can also use Maps, download applications from Play Store, back up your settings to Google servers, and take advantage of other Google services on your phone.

IMPORTANT

- Some applications, such as Calendar, work only with the first Google Account you add. If you plan to use more than one Google Account with your phone, be sure to sign into the one you want to use with such applications first. When you sign in, your contacts, Gmail messages, Calendar events, and other information from these applications and services on the web are synchronized with your phone. If you don't sign into a Google Account during setup, you will be prompted to sign in or to create a Google Account the first time you start an application that requires one, such as Gmail or Play Store.
- If you have an enterprise account through your company or other organization, your IT department may have special instructions on how to sign into that account.

Calls

Making a call

1 From the Home screen, tap the **Phone Key** to open the keypad.

2 Enter the number on the keypad. To delete a digit, tap the **Clear Key**.

3 Tap the **Call Key** to make a call.

4 To end a call, tap the **End Key**.

TIP

- To enter "+" to make international calls, touch and hold 0 +.

Calling your contacts

1 From the Home screen, tap **Contacts** to open your contacts.

2 Scroll through the contact list or tap the **Search contacts** field and enter the first letter(s) of the contact you want to call. You can also tap the letters at the right side of the screen.

3 In the list that is displayed, tap the contact you want to call.

4 In the Contact Info screen, tap the phone number you wish to call.

Answering and rejecting a call

When the screen is locked

When your phone rings, swipe the **Answer** icon in any direction to answer the incoming call.

Swipe the **Decline** icon in any direction to reject an incoming call.

When the screen is unlocked

When your phone rings, tap the **Answer Key**. Tap **Decline Key** to reject an incoming call.

NOTE

- If the **Answer an incoming call** gesture is activated, you can bring the phone up to your ear to answer incoming calls.
- Tap or swipe the **Decline with message Key** if you want to send a message to the caller. If the caller is unknown, the **Decline with message Key** is not available.

Adjusting the in-call volume

To adjust the in-call volume during a call, use the Volume Keys on the back side of the phone.

Making a second call

1 During your initial call, tap the **Menu Key** and select **Add call**.

2 Dial the number or search your contacts.

3 Tap the **Call Key** to connect the call.

4 Both calls will be displayed on the call screen. Your initial call will be put on hold.

5 Tap the Call entry on the screen to toggle between active calls or tap **Merge calls** to merge the calls.

TIP

- Tap **Manage members** to end individual calls or separate calls from a conference call.

6 To end active calls, tap the **End Key**. If there is no active call, it will end the call on hold.

NOTE

- You will be charged for each call you make.

Viewing your call logs

From the Home screen, tap the **Phone Key** and the **Call logs** tab.

You can view a complete list of all dialed, received, and missed voice calls.

TIP

- Tap any single call log entry to view the date, time, and duration of the call.
- Tap the **Menu Key**, then tap **Delete all** to delete all the recorded items or **Delete** to delete individual or groups of entries.

Call settings

You can configure phone call settings, such as call forwarding, and other special features offered by your carrier.

1 From the Home screen, tap the **Menu Key** and tap **All settings**.

2 Tap the **Networks** tab (if necessary) > **Call**.

3 Set any of the available options.

Contacts

You can add contacts on your phone and synchronize them with the contacts in your Google Account or other accounts that support syncing contacts.

Searching for a contact

1 From the Home screen, tap the **Apps Key** and tap **Contacts** to open your contacts.

OR

From the Home screen, tap the **Phone Key** > **Contacts** tab.

2 Tap the **Search contacts** field and enter the contact name using the keypad. You can also tap the letters at the right side of the screen.

Adding a new contact

1 From the Home screen, tap the **Phone Key** and enter the new contact's number. Tap the **Menu Key** > **Add to Contacts** > **New contact.**

2 Select the account where you want to add the new contact. Locations depend on the type of accounts you have added to your device.

NOTE

- The entry fields varies depending on the account.

3 If you want to add a picture to the new contact, tap . Choose from **Take photo** or **Select from Gallery**. Then browse for an image and select it.

4 Tap to enter more specific name information.

5 Enter the details about your contact.

6 Tap **Save** to save the contact entry.

Favorite Contacts

You can classify frequently called contacts as favorites.

To add a contact to your favorites

1 From the Home screen, tap the **Apps Key** and then **Contacts** to open your contacts.

2 Tap a contact to view its details.

3 Tap the star to the right of the contact's name. The star turns gold and the contact is added to your favorites.

To remove a contact from your favorites list

1 From the Home screen, tap the **Apps Key** and then **Contacts**.

2 Tap the **Favorites** tab.

3 Tap a contact to view its details.

4 Tap the gold star to the right of the contact's name. The star turns grey and the contact is removed from your favorites.

Joining and Separating Contacts

When you have two or more entries for the same contact, you can join them into a single entry. You can also separate contacts that were joined.

1 From the Home screen, tap the **Apps Key** and then **Contacts**.

2 Tap the **Menu Key** > **Join contacts**.

3 Select a tab at the top of the screen.

- Tap **Join suggestion** to select entries to merge.
- Tap **Joined contacts** to select entries to separate.

4 Checkmark the entry (or entries) you want to join or separate, then tap the **Join** or **Separate** button.

AT&T Address Book (AAB)

AT&T Address Book (AAB) is an application that automatically syncs your contacts to an online address book for safekeeping! When you first turn on the phone or change your SIM card and open Contacts, the AAB application is displayed.

After signing up for this service, your information is synced on a regular basis.

You can find more information on this service and access your online address book at www.att.com/addressbook. You can find the synchronization menu for the service by tapping the **Menu Key** > **All settings** > **General** tab > **Accounts & sync** > **AT&T Address Book**.

Messaging

Your phone combines text and multimedia messaging into one intuitive, easy-to-use menu.

Conversation view

Messages exchanged with another party are displayed in chronological order so that you can conveniently see an overview of your conversation.

Sending a message

1 Tap **Messaging** on the Home screen, then tap to create a new message.

2 Enter a contact name or phone number in the **To** field. As you enter the contact name, matching contacts appear. You can tap a suggested recipient. You can also add multiple contacts.

NOTE

- You will be charged for a text message for every person you send the message to.

3 Tap the text field and start entering your message.

4 Tap the **Menu Key** to open the options menu. Choose from any of the available options.

5 Tap **Send** to send your message.

Warning

- The 160-character limit may vary from country to country depending on how the text message is coded and the language used in the message.
- If an image, video, or audio file is added to a text message, it will be automatically converted into a multimedia message and you will be charged accordingly.

NOTE

- When you get a text message during a call, there will be an audible notification.

Using smilies

Liven up your messages using smilies and emojis.

When writing a new message, tap the **Menu Key** > **Insert smileys.** To access emojis, tap on the LG keyboard and choose an emoji category to view the available emojis.

Changing the conversation theme

Sets how your conversations are displayed.

1. Open the **Messaging** app and tap the **Menu Key** > **Settings** > **Conversation theme**.
2. Tap the **Wallpaper** tab to choose the conversation background. Choose from the 6 options provided, a photo from your Gallery, or take a picture to use.
3. Tap the **Bubble** tab to choose the conversation style. Choose from the 6 options provided.

Changing your message settings

Your phone's message settings are predefined, so you can send messages immediately. You can change the settings based on your preferences.

- From the Home screen, tap **Messaging** > **Menu Key** > **Settings**.

Email

You can use the **Email** application to read email from providers other than Gmail. The Email application supports the following account types: POP3, IMAP and Microsoft Exchange (for Enterprise users).

To open the Email application

- From the Home screen, tap the **Apps Key** > **Email**.

The first time you open the **Email** application, a setup wizard opens to help you add an email account.

Microsoft Exchange Email Account

Email address – Enter the account email address.

Password – Enter the account password.

Server address – Enter the server address.

Domain – Enter the account domain (optional).

Username – Enter the account username.

Use secure connection (SSL) – Choose whether or not to use SSL for Microsoft Exchange.

Client certificate – Allows you to add a client certificate (if necessary).

Other (POP3 & IMAP4) Email Account

Email address – Enter the account email address.

Password – Enter the account password.

Incoming server settings

POP/IMAP server – Select protocol type, either POP or IMAP.

Security type – Choose from Off, SSL, or TLS.

Port number – Normally each account's default number will be displayed.

Outgoing server settings

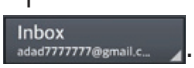
SMTP server – Enter the outgoing email server address.

Security type – Choose from Off, SSL, or TLS.

Port number – Normally each account's default number will be displayed.

To open your Combined inbox

If you have configured email to send and receive email from more than one account, you can view all messages sent to all accounts in your **Combined inbox**.

- Open the **Email** application and touch 

. Then touch **Combined inbox**.

Messages in the Combined inbox are color coded on the left, by account.

When a new email arrives in the Inbox, there will be sound and/or vibration notification (depending on your current sound and vibrate settings).

Composing and Sending Email

1. In the **Email** application, tap **Compose** .
2. Enter an address for the message's intended recipient. As you enter text, matching addresses will be offered from your contacts. Separate multiple addresses with commas.
3. Tap **Cc/Bcc** to copy or blind copy to other contacts/email addresses.
4. Tap the text field and enter your message.
5. Tap **Attach** to attach the file you want to send with your message.
6. Tap **Send** to send the message.

If you are not ready to send the message, tap **Save** to save it in a Drafts folder. Touch a message in the Drafts folder to resume working on it. Your message will also be saved as a draft if you touch the **Back Key** before sending it.

Tap **Cancel** to abandon and delete a message, including any saved drafts. If you are not connected to a network, for example if you're working in airplane mode, the messages you send are stored in your **Outbox** folder until you're connected to a network. If it contains any pending messages, the Outbox will be displayed on the Accounts screen.

NOTE

- The messages sent using an Exchange account will not be stored on the phone; they will be stored on the Exchange server itself. If you want to see your sent messages in the **Sent** folder, you may need to open the Sent folder and select **Refresh** from the options menu.

Working with Account Folders

Each account has **Inbox**, **Outbox**, **Sent**, **Drafts**, **Trash** and **Junk** folders. Depending on the features your account service provider supports, you may have additional folders.

Adding and Editing Email Accounts

To add an email account

1 From the Home screen, tap the **Apps Key** > **Email** .

2 Select the desired email provider.

If an email account is already set up, the wizard is not activated automatically.

In this case, tap the **Menu Key** > **Settings > Add account** .

To change account settings

1 Open the **Email** application.

2 Tap the **Menu Key** > **Settings**.

3 Tap **General settings** to adjust the settings that affect all accounts. Or tap an individual account to adjust settings only for that account.

To delete an email account

1 Open the **Email** application.

2 Tap the **Menu Key** > **Settings**.

3 Select the account(s) you want to delete and tap **Remove account**.

4 Tap **Yes** to confirm.

Social Networking

With your phone, you can enjoy social networking and manage your micro-blog in on-line communities. You can update your current status, upload photos, and view your friends' status updates in real-time.

You can add your Facebook, Google+, and Twitter accounts to your phone. If you don't have an account, you can visit their sites to set one up.

NOTE

- Additional costs may be incurred when connecting and using online services. Check your data charges with your network provider.

Adding an account to your phone

1. From the Home screen, tap the **Menu Key** > **All settings** > **General** tab > **Accounts & sync**.
2. Tap **Add account**.
3. Tap any social networking service you want to use.
4. Enter your email address and password that you set up for your social networking account, then tap **Log in**.

Adding a social networking widget on the Home screen

If you add a social networking widget on your Home screen, the widget will show your status when your phone receives updates from the network.
You can also access the social community directly by tapping the widget.

1. Touch and hold an empty spot on the Home screen.

NOTE

- If there is no available space on a particular Home screen panel, you won't be able to add any widget; you must delete or remove an item before you can add another item. In this case, you have the option of switching to another Home screen panel.

2. Tap the **Widgets** tab and scroll to the right or left until you see the social network you want.
3. Tap the desired widget to add it to the Home screen panel.

Viewing and updating your status

1 Go to the Home screen panel where the social networking widget is located. You can see the current status of social applications you set.

2 Tap the **Status update** icon or field to update your status with comments or upload pictures.

3 After entering comments and attachment (if any), tap the **Post** icon.

TIP

- You can use information about friends only in your social network(s) or sync all data to Contacts.

Syncing accounts on your phone

You can sync information from your social networking accounts with your Contacts and other functions on your phone, if applicable.

1 From the Home screen, tap the **Menu Key** > **All settings** > **General** tab > **Accounts & sync**.

2 Checkmark **Auto-sync data** to activate automatic synchronization.

3 Tap the account you want to sync.

4 Check the desired options, such as Contacts. A checkmark indicates that synchronization has been enabled.

Removing accounts on your phone

1 From the Home screen, tap the **Menu Key** > **All settings** > **General** tab > **Accounts & sync**.

2 Tap the account(s) you want to delete, then **Menu Key** > **Remove account** > **OK**.

Life Square

The Life Square app allows you to collect and save call logs, messages, photos, videos, voice recordings, your posts on social networking sites.

To select what events are logged

1 Open Life Square and tap the **Menu Key** > **Settings**.

2 Under the Types of Content section, tap the check box next to the items you want to log. Choose from **Calls, Messages, Photos, Videos, Facebook**, and **Twitter**.

Camera

The Multi Point AF (Autofocus) feature enables you to get a clearer and natural picture even if the objects are not in the center.

To open the Camera application, tap **Camera** on the Home screen.

Getting to know the viewfinder

Swap camera – Allows you to swap between the rear camera lens and the front camera lens.

Flash – Tap to turn the flash **On**, **Off** or set it to **Auto**.

Number of new pictures available at the current size.

Mode Switch – Touch and slide to switch between Camera mode and Video mode.

Capture – Allows you to take a photo.

Gallery – This enables you to access your saved photos and videos within the camera mode. Simply tap and your Gallery will appear on the screen.

Settings – Tap to open the settings menu. See **Using the advanced settings** on page 45.

Mode – Allows you select the shot mode from **Normal**, **Shot & Clear**, **Dynamic tone(HDR)**, **Panorama**, **VR panorama**, **Burst shot**, **Beauty shot**, **Dual camera**, **Time catch shot**, **Intelligent auto**, **Sports** and **Night**.

Taking a photo

1 From the Home screen, tap **Camera** .

2 Holding the phone firmly, point the lens towards the subject you want to photograph.

NOTE

- To zoom in use the pinch-to-zoom method.

3 A focus box will appear in the center of the viewfinder screen. You can also tap anywhere on the screen to focus on that spot.

4 When the focus box turns green, the camera has focused on your subject.

5 Tap **Capture** to take a picture.

Once you've taken the photo

Your captured photo will appear on the screen if **Auto review** is set to **On** (refer to **Using the advanced settings** below). Otherwise, tap the image preview at the bottom right corner of the screen to view the picture.

Using the advanced settings

In the viewfinder, tap to open the advanced options.

You can change the camera settings by scrolling the list.

Cheese shutter - Allows you to take a picture by voice.

Brightness - Defines and controls of the amount of sunlight entering the lens. Slide the brightness indicator along the bar towards "-" for a lower brightness video or towards "+" for a higher brightness video.

Focus - Tap to select the focus mode.

Auto: Allows the camera to focus automatically. (The camera continuously focuses on the objects in the photo).

Manual: Allows you to set the focus mode manually before taking a photo.

Face tracking: The camera detects and focuses on human faces automatically.

Image size - Tap to set the size (in pixels) of the picture you take. Select a pixel value from the following options: **13M 4160x3120 (4:3), W10M 4160x2340 (16:9), 8M 3264x2448 (4:3), 1M 1280x960 (4:3)**.

ISO - Control the camera's sensitivity to light. Choose from **Auto, 100, 200, 400** and **800.**

White balance - The white balance ensures any the white areas in your picture are realistic. To enable your camera to adjust the white balance correctly, you may need to determine the light conditions. Choose from **Auto, Incandescent**, **Sunny**, **Fluorescent**, and **Cloudy**.

Color effect - Allows you to set a color effect for the photo. Choose from **None, Mono, Sepia,** and **Negative**.

Timer - The self-timer allows you to set a delay after the shutter is pressed. Select **Off**, **3 sec**, **5 sec**, or **10 sec**. This is ideal if you want to be included in a photo.

Auto review - If you set Auto review on, it will automatically display the picture that was just taken.

Geotagging - Activate to use your phone's location-based services. Take pictures wherever you are and tag them with the location. If you upload tagged pictures to a blog that supports geotagging, you can see the pictures displayed on a map.

NOTE

- This function uses wireless networks. You need to activate Google's location service. From the Home screen, tap the **Menu Key** > **All settings** > **General** tab > **Location access** > **GPS satellites** and **Wi-Fi & mobile network location**.

Shutter sound - Adjust the sound the shutter makes when taking a picture.

Volume key - Set how to use the volume key. Choose from **Capture** or **Zoom**.

Help - Touch this whenever you want to know how a function works. This icon will provide you with a quick guide.

Reset - Restore all camera default settings.

NOTE

- When you exit the camera, some settings will return to their defaults. Check the camera settings before you take your next photo.
- The settings menu is superimposed over the viewfinder, so when you change elements of the image color or quality, you will see a preview of the image change behind the settings menu.

Viewing your saved photos

You can access your saved photos from within the camera mode. Just tap the image preview at the bottom of the camera screen.

TIP

- Flick left or right to view other photos or videos. Tap the screen to display other options menus.

– Tap to share the photo using SmartShare (turn on Wi-Fi if it's not already on).

– Tap to edit the photo.

– Tap to take a new photo.

– Tap to share the photo.

– Tap to delete the photo.

Menu Key - Tap to access **Set image as, Move, Copy, Copy to Clip Tray, Rename, Rotate left, Rotate right, Crop, Slideshow, Add location, Print** and **Details.**

TIP

- If you have a social networking account and set it up on your phone, you can share your photo with your social networking community.

NOTE

- Additional charges may apply when multimedia messages are downloaded while roaming.

Setting a photo as the wallpaper

1. Tap the photo you want to set as wallpaper to open it.
2. Tap the **Menu Key** > **Set image as** > **Home screen wallpaper** or **Lock screen wallpaper**.
3. Crop the image as desired and tap **Yes**.

Multi-point Auto Focus

When you take a picture, the Multi-point Auto Focus (AF) function operates automatically and will allow you to see a clear image.

NOTE

- When Multi-point AF is active, the focus box will change to a green color.

Shot & Clear

The Shot & Clear feature allows you to remove interfering objects from pictures.

1 Open the **Camera** application.
2 Tap MODE > **Shot & Clear**.
3 Tap to take the picture.
4 Tap the outlined objects you want to remove.
5 Tap to save the picture.

NOTE

- Please take a picture without moving the camera.
- This function may not be supported if the moving object's color and the background color are similar.
- This function may not be supported if the moving object's size is too small or too big.
- This function may not be supported if the object's movement is small.
- When there are too many moving objects, only a part of the movement can be detected.

Super zooming

You can use a zoom up to 8 times while taking pictures.

NOTE

- This function operates automatically while zooming in and out.
- Use a steady hand. This feature does not work with some functions.
- Objects can be overlapped when taking a picture of fast-moving subjects.

Video Camera

Getting to know the viewfinder

To open the Video Camera application, tap **Camera** on the Home screen and slide down.

Swap camera – Allows you to swap between the rear camera lens and the front camera lens.

Flash – Tap to turn the flash **On, Off** or set it to **Auto.**

Mode Switch – Touch and slide to switch between Camera mode and Video mode.

Record – Allows you to start recording.

Gallery – This enables you to access your saved photos and videos from within the video camera mode. Simply tap and your Gallery will appear on the screen.

Settings – Tap to open the settings menu. See **Using the advanced settings** on page 50.

Recording mode - Allows you to change the recording mode to **Normal**, **Live effect**, **Dual recording** or **Tracking zoom**.

TIP

- When recording a video, place two fingers on the screen and pinch to use the Zoom function.

Recording a video

1 From the Home screen, tap **Camera** and slide the **Mode Switch** button down to change to Video mode. The Record icon will change to .

2 The video camera's viewfinder will appear on the screen.

3 Holding the phone horizontally, point the lens towards the subject of the video.

4 Tap **Record** once to start recording.

5 A timer showing the length of the video is displayed at the top left corner of the screen.

6 Tap **Stop** to stop recording.

NOTE

- Tap on the screen to take a puase while you're recording.

Using the advanced settings

Using the viewfinder, tap to open the advanced options.
Adjust the video camera settings by scrolling the list.

Audio zoom – Increases sound sensitivity in zooming area and decreases noise when recording.

Video size – Allows you to change the video resolution to **UHD 3840x2160, FHD$_{60}$ 1920x1080(60fps), FHD 1920x1080(30fps), HD 1280x720, QVGA 320x240, QCIF 176x144(MMS)**.

Brightness – Defines and controls of the amount of sunlight entering the lens. Slide the brightness indicator along the bar towards "-" for a lower brightness video or towards "+" for a higher brightness video.

Anti-shaking – Allows you to reduces image blur due to the movement of the subject of the video or hand movement.

White balance – The white balance ensures any the white areas in your video are realistic. To enable your camera to adjust the white balance correctly, you may need to determine the light conditions. Choose from **Auto**, **Incandescent**, **Sunny**, **Fluorescent**, and **Cloudy**.

Color effect - Allows you to set a color effect for the photo. Choose from **None, Mono, Sepia,** and **Negative.**

Auto review – If you turn Auto review on, it will automatically play the video you just recorded.

Geotagging – Activate to use your phone's location-based services. Take videos wherever

you are and tag them with the location. If you upload tagged videos to a blog that supports geotagging, you can see the videos displayed on a map.

Volume key - Set how to use the volume key. Choose from **Record** or **Zoom**.

Help - Touch this if you want to know how this function works. This icon will provide you with a quick guide.

Reset - Restore all video camera default settings.

After recording a video

Touch the image preview at the bottom of the screen to view the last video you recorded.

Tap to play back.

– Tap to share your video using the SmartShare function.

– Tap to record a new video.

– Tap to share the video.

– Tap to delete the video.

Menu Key - Tap to access **Move**, **Copy**, **Rename**, and **Details.**

Options during the video playback

Touch the image preview at the bottom of the screen to view the last video you recorded.

Audio Zoom: Increases the volume at selected area during video playback.

Track Zoom: Selects an object on the screen and play video expending it.

QSlide: Enables an overlay on your phone's display for easy multitasking.

SmartShare: Shares media files with DLNA certified devices.

Lock/Unlock: Locks the touch keys to prevent unintentional touches.

Screen ratio: Allows you to adjust the screen ratio. (Best Fit, Full Screen or Original Size)

Tap to access **Subtitles**, **Share**, **Delete**, **Settings**, and **Details**.

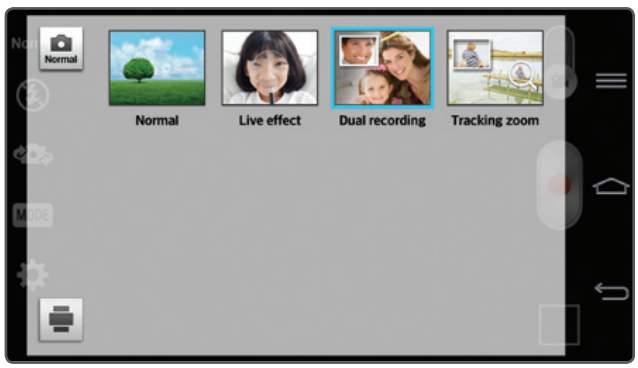
To adjust the volume of a video while it is playing, use the Volume Keys on the back side of the phone.

Dual Recording

The **Dual Recording** feature allows you to record videos with the front and rear cameras at the same time.

1 Open the **Camera** application.

2 Change to video mode and tap MODE > **Dual recording**.



3 Tap **Record** to start dual recording.

NOTE

- Drag the small screen to move it to your desired location.
- Touch and hold the small screen to resize it.
- Tap on the small screen to switch screens.
- Tap to change small window's frame.
- Tap on the screen to take a pause while you're recording.

4 Tap on the screen to take a stop while you're recording.

Tracking zoom

Defines focus to enlarge before taking a video. Touch and hold the small screen to resize or move it.

1 Open the **Camera** application.

2 Change to video mode and tap MODE > **Tracking zoom**.

NOTE

- While a video is playing, slide the screen up or down to adjust the screen brightness.
- While playing a video, slide the screen left or right to rewind or fast-forward.
- Do not press too hard; the touch screen is sensitive enough to pick up a light, but firm touch.

Dual Play

Dual Play (connected wired or wirelessly to two displays) can be run on a different screen.

NOTE

- Connect two devices using wired (SIimport-HDMI) cable or a wirelessly (Miracast).
- The connectable device can be a TV or a monitor supported by an HDMI cable or Miracast.
- The Gallery, Videos, Polaris Viewer 5 is supported on Dual Play.
- Tap ⌂ once when two displays are a different status (i.e. the monitor is playing a video and your phone's video app is displaying empty screen), then Dual Play will start.
- Not all videos are supported by Dual Play.
- Dual Play operates at 1280X720 or higher display resolution.

Multimedia

You can store multimedia files to a internal memory to have easy access to all your image and video files.

Gallery

The Gallery is where you can access the Gallery of stored video images. You can view them, share them with your friends, and delete and edit them.

1 From the Home screen, tap the **Apps Key** > **Gallery** .

2 Scroll up and down to view more albums.

3 Tap an album to open it and view its details. (The pictures and videos in the album are displayed in chronological order.)

Music

Your phone has a music player that lets you play all your favorite tracks. To access the music player from the Home screen, tap the **Apps Key** and tap **Music** .

How to save music/video files to the phone

Connect your phone to the PC using the USB cable.

You'll receive a notification that the USB is connected and the USB connection type prompt is displayed. Tap **Media sync (MTP)** or **Send images (PTP)** and open the folder you wish to view from your computer.

Save music or video files from the PC to the phone.

- You may copy or move files from the PC to the phone's removable storage using a card reader.
- If there is a video file with a subtitle file (.smi file with the same name as the video file), place them in the same folder to display the subtitle automatically when playing the video file.
- When downloading music or video files, copyright must be secured. Please note that a corrupted file or file with a wrong extension may cause damage to the phone.

Playing a song

1 From the Home screen, tap the **Apps Key** and tap **Music** .

2 Tap the **Songs** tab.

3 Tap the song you want to play.

4 Tap to pause the song.

5 Tap to skip to the next song.

6 Tap to go back to the beginning of the song. Tap twice to go back to the previous song.

To change the volume while listening to music, press the Volume Keys on the back side of the phone.

Touch and hold a song to access the following options: **Play**, **Add to playlist**, **Share**, **Set as ringtone**, **Delete**, **Details**, and **Search**.

Working with Playlists

You can create playlists to organize your music files into sets of songs, which you can play in the order you set or in a shuffle.

To create a playlist

1 When viewing the library tap the **Playlists** tab.

2 Tap the **Menu Key** > **New playlist**.

3 Enter a name for the playlist, then tap **OK**.

4 Select the songs you want to add to the playlist and tap **Add**. The new playlist is added to the **Playlists** library.

To add a song to a playlist

Touch and hold a song and tap **Add to playlist**. Then choose the name of the playlist. You can also add the song that is playing in the Playback screen by tapping the **Menu Key** then tapping **Add to playlist** and selecting the desired playlist.

To remove a song from a playlist

1 Open a playlist.

2 Touch and hold the song you want to remove, then tap **Remove from playlist**.

To rename a playlist

1 Open the **Playlists** library.

2 Touch and hold the playlist to display the options menu, then tap **Rename**.

3 Enter the desired name and tap **OK**.

To delete a playlist

1 Open the **Playlists** library.

2 Touch and hold the playlist to display the options menu, then tap **Delete**.

3 Tap **Yes** to confirm.

NOTE

- Music file copyrights may be protected by international treaties and national copyright laws. Therefore, it may be necessary to obtain permission or a licence to reproduce or copy music. In some countries, national laws prohibit private copying of copyrighted material. Before downloading or copying the file, please check the national laws of the relevant country concerning the use of such material.

Google Applications

About Google applications

Google applications, including mobile versions of Gmail, Hangouts, Google Calendar, and Google Maps, are loaded on your phone.

1 To set up a Google account, tap any Google application, enter your user name and password and sign in.

2 After signing in, your contacts, email, and calendar in your Google account will automatically synchronize with your phone.

Maps

You can use Google Maps to find your current location, to view real-time traffic conditions, to get detailed directions by foot, public transportation, bicycle, or car, and to navigate by using spoken, turn-by-turn driving instructions using the Google Maps Navigation service. You can search on a street map or a satellite image to locate an address or a landmark, and you can view some locations as if you were strolling down the street. There are some locations that Maps does not have information about.

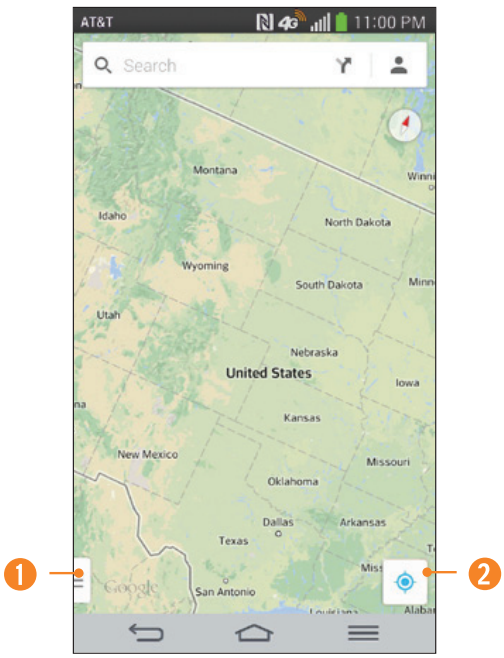
Launch Google Maps

1 Tap > > **Maps**.

NOTE

- Before using any navigation programs, make sure your phone is set to allow location detection, and then select which sources you want to use.
- Tap > > **All settings** > **General** tab > **Location access**. Tap the Access to my location switch and select **Wi-Fi & mobile network location** and/or **GPS satellites** for location sources.

2 Tap . The map centers on a blue circle that indicates your location. An arrow indicates the direction the device is facing. A transparent blue circle around the dot indicates that your actual location is within the circle.



1. Tap to access various features on Google Maps.
2. My Location

To get an address and additional information for a location:

1. Touch and hold a location on the map. A bar with the address and a thumbnail from Street View (if available) opens at the bottom of the screen.
2. Drag the bar upwards to access additional options.

To utilize Google Maps:

1. Tap > > **Maps**.
2. Pinch out or in to zoom in or out of the current map view.

OR

Tap each icon at the top of the screen.

- (Search) to search for a location.
- (Directions) to get directions.
- (Your activity) to access your favorite places.
- (Layers) to view locations and additional information overlaid on the map.

To search for a location:

1. While viewing a map, tap .
2. In the search box, enter the place you're looking for.
   - You can enter an address, a city, or a type of business or establishment. For example, "theater in New York."
3. Tap . Red markers indicate search matches on the map.
4. Tap a marker to display a bar that contains the name and travel information. Drag the bar upwards to open a screen with more information about the location, as well as options for obtaining directions.

To get directions:

1 While viewing a map, tap .

2 Enter a starting point in the Start point field, or leave as is to allow GPS to find your location, and your destination in the End point field.

- To reverse directions, tap .

3 Tap the icon for car, public transit, biking, or walking directions.

4 The directions to your destination appear as a blue route. Select a gray route if you prefer it.

5 Drag the bar up to view directions as text or tap to navigate to the destination.

To add layers for familiar features such as Traffic or Terrain

1 While viewing a map, tap . A menu opens with a list of layers.

2 Tap the layer you'd like to view. You can add multiple layers.

- If you turn a layer on, the layer will remain on the map until you specifically turn it off or clear the map.

Play Store

Play Store lets you browse through and download thousands of fun and useful applications and games. You can check other users' comment regarding an application or you can post your own comments. If you install applications and games from Play Store, they appear in the phone's menu below the preloaded applications, and you can find them by scrolling down with your finger. You can open downloaded applications from the Play Store by tapping the **Menu Key** > **My apps**.

NOTE

- To purchase a paid app, you'll need to set up a payment method with Google Checkout™. You have the option to use a credit card or charge to your carrier bill.

NOTE

- When you want to exit a game or application, use the **Home Key** or **Back Key**, which will return you to the Home screen. Or select Menu (or Options) within the game or application and select Exit. (Exit option may vary by

game/application). Ending applications that continue to run in the background (after going back to the Home screen) will help conserve battery life and reduce unwanted data usage.

Gmail

Gmail can be configured when you first set up your phone. Depending on your synchronization settings, Gmail on your phone is automatically synchronized with your Gmail account on the web. From the Home screen, tap the **Apps Key** > **Google** > **Gmail**. The inbox conversations list is your default view.

Tap the **Menu Key** for the following additional options: **Refresh, Label settings, Settings**, **Send feedback**, and **Help**.

Compose - Allows you to compose a new message.

Search - Allows you to search your account.

Accounts & Labels - Allows you to view your accounts and labels.

NOTE

- Drag the screen downwards to refresh and check for new email.

Hangouts

The Hangouts application lets you have real-time text conversations with your friends.

To Open the Hangouts application

From the Home screen, tap the **Apps Key** > **Google** > **Hangouts**.

To sign out of Hangouts

From the Home screen, tap the **Menu Key** > **Settings** > the login account > **Sign out**.

Chatting with Friends

1. From the Home screen, tap the **Apps Key** > **Google** > **Hangouts**.
2. Tap + to view your contacts list. It includes all of the Google Accounts you've added.
   - Tap the name of the person in your contacts list. If your friend is not yet on Hangouts, you can invite your friend via SMS.

   OR
   - Tap the text field to enter a name, email, or number.
3. Tap **Message** and then enter your message.

4 Tap the **Send** ➤.

Hangouts chatting list

Touch and hold the friend in the chat screen. You can set below options.

	Tap to turn the notifications off.
	Tap to archive the conversation.
	Tap to delete the conversation.

Blocking your Friends

- To block a friend from exchanging messages with you, tap the friend in the chatting list. Tap the **Menu Key** > **People & options**. Then tap the block option.
- To remove a friend from the blocked list, from the chatting list, tap the **Menu Key** > **Settings** > the login account > **Blocked people.** Then tap **Unblock** next to the person's name.

Hangouts Settings

- From the chatting list, tap the **Menu Key** and choose from the available options. To configure settings for the Hangouts app, tap **Settings**.
- While chatting, tap the **Menu Key** to choose from **People & options, New group Hangout, Turn history off, Archive, Delete, Send feedback**, and **Help**.

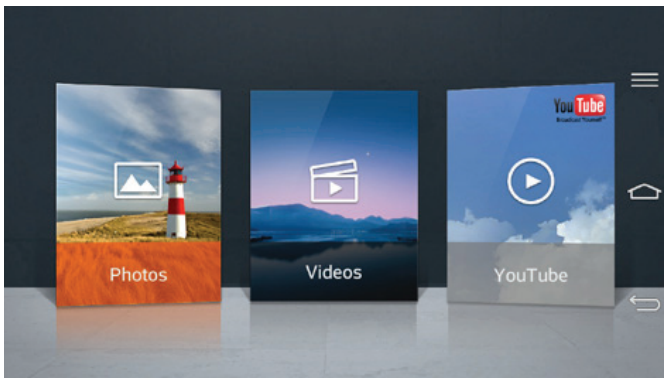
QuickTheater

The QuickTheater feature allows you to directly play movies and view photos.

1 Hold the phone horizontally while on the lock screen.

2 Touch the center of the screen with both thumbs and slide in opposite directions.

3 You can choose to view photos, videos, or access YouTube using QuickTheater.



NOTE

- The screen lock mode should be set as Swipe in order to use the QuickTheater function.

1 From the Home screen, tap the **Menu Key** > **Lock screen settings** > **Select screen lock**.

2 Select **Swipe**.

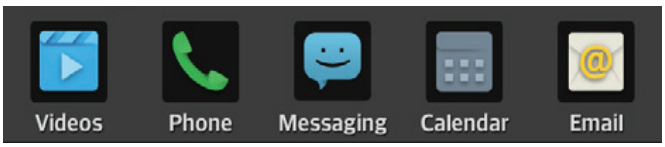
QSlide

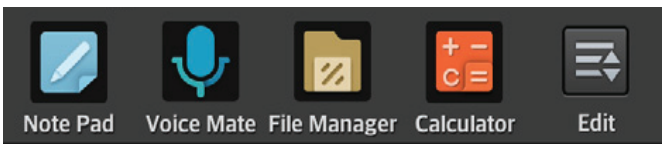
The QSlide function enables an overlay on your phone's display for easy multitasking.

1 While using an app that supports QSlide, tap to access QSlide.

OR

Open the Notifications Panel and touch an app from the **QSlide apps** bar.

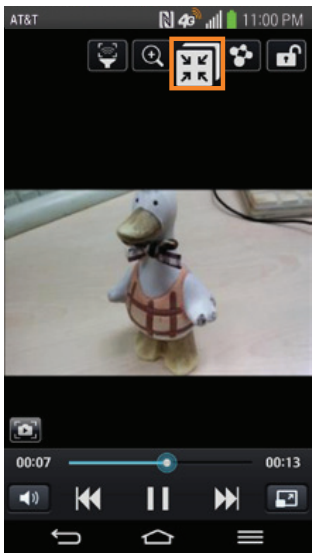


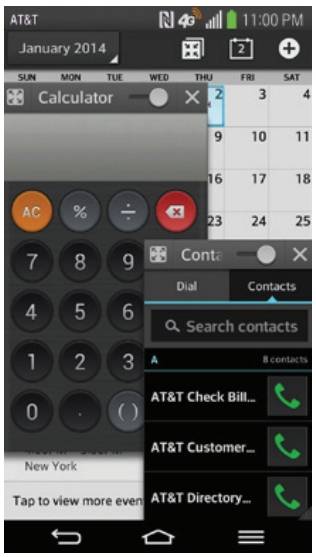


2 Use the slider to adjust the transparency of the overlay. You can also tap to go back to full view.

3 You can make a call, or choose other phone options.

4 Tap ✕ to exit the QSlide function.





NOTE

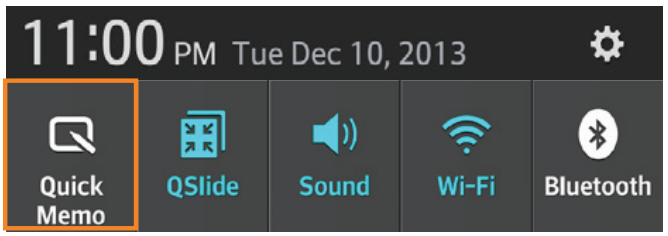
- The QSlide function can support up to two windows at the same time.

QuickMemo

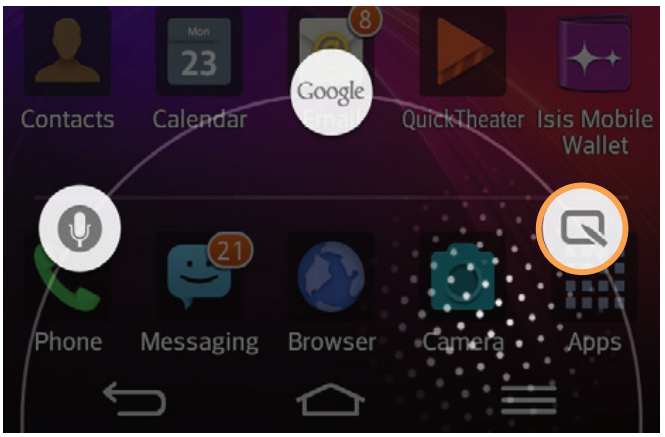
The QuickMemo feature allows you to create memos and capture screen shots.

You can use QuickMemo to easily and efficiently create memos during a call, with a saved picture or on the current phone screen.

1 Touch and drag the Status Bar down and tap . You can also access it by swiping upwards from the main keys area at the bottom of the Home screen.



OR



2 Create a memo using the following options:

- - Tap to keep the memo on top and and continue using the phone. Tap to exit the overlay mode.
- - Tap to select what type of background to use.
- - Tap to undo the most recent action.
- - Tap to redo the most recently deleted action.
- - Tap to select the pen type and color or the cropping tool.
- - Tap to use the eraser to erase the memo that you created.

- Tap to share the memo with others via any of the available applications.

- Tap to save the memo you've created.

- Tap to hide or display the toolbar.

NOTE

- Please use a fingertip while using the QuickMemo feature. Do not use your fingernail.

3 Tap to save the current memo to the **Notebook** or **Gallery**.

Discard QuickMemos:

- Tap the **Back Key**.

View the Saved Memo

From the Home screen tap the **Apps Key** > **Gallery** or **Notebook** and select the **QuickMemo** album.

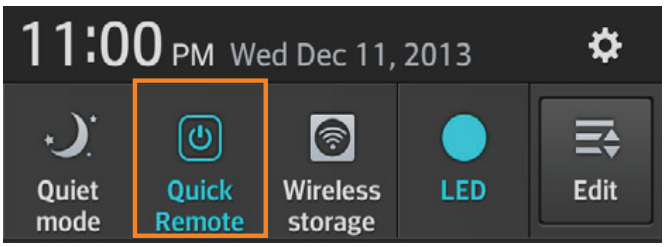
QuickRemote

QuickRemote turns your phone into a Universal Remote for your home TV, cable box, audio system, DVD/Blu-ray players, air conditioner and projector.

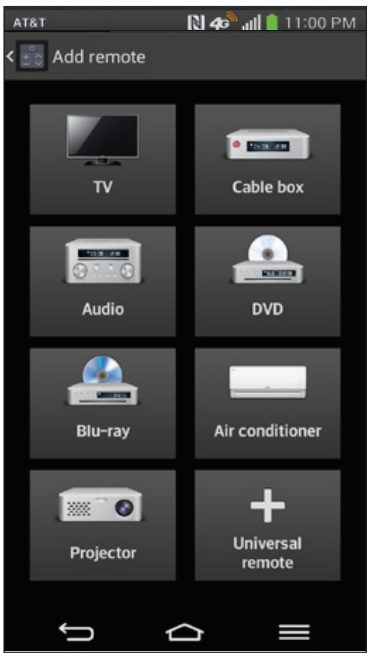
1 From the Home screen, tap the **Apps Key** > **QuickRemote** > .

OR

Touch and slide the Status Bar downwards and touch > **ADD REMOTE**.



2 Select the type of device and its manufacturer, then follow the on-screen instructions to configure the device(s).



TIP

- To quickly use the QuickRemote feature, touch and slide the Status Bar downward and tap on the Quick Settings bar to

activate it.

Touch the **Menu Key** to access additional options.

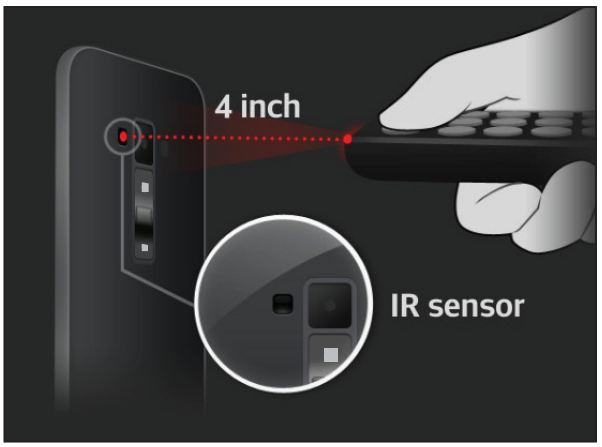
NOTE

- QuickRemote features an ordinary remote control and infrared (IR) signals to operate the same way. Therefore, be careful not to cover the infrared sensor when you use the QuickRemote feature. This function may not be supported depending on the model, the manufacturer or service company.

Universal remote

You can create your own personalized universal remote and choose where to place all of the buttons.

1. From the Home screen tap the **Apps Key** > **QuickRemote** .
2. Tap > **Universal remote**.
3. Enter the Remote name and touch **OK**.
4. Place the buttons you want on the remote at the desired location and tap **Next**.
5. Tap the button to be learned.
6. Point original remote 4 inches away from the IR receiver at the back of the phone.



7. Press and hold the button on the original remote for 2 seconds.

Using the Magic Remote feature

Magic Remote controls your TV using a Touchpad and Smart Text(keyboard). Magic Remote is compatible only with LG Smart TVs released in 2012 and after.

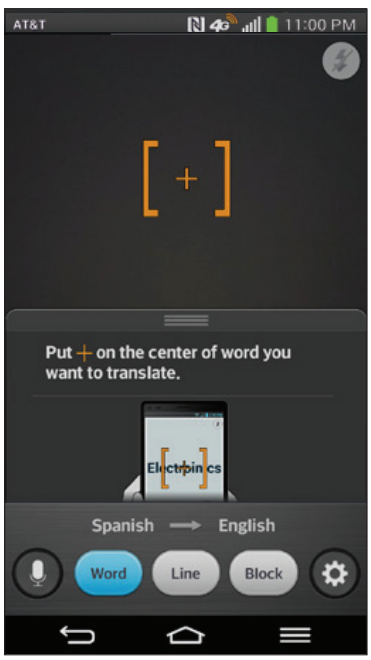
1. Select the remote you want, and then tap the **Menu Key** > **Magic Remote setting**.
2. Tap the **Supported models** button and check whether your TV supports this feature.
3. Connect your phone and LG Smart TV to the same Wi-Fi network.

4 Select the device and enter the certificate number in your phone.

- **Touchpad:** Move the TV pointer with the touchpad.
- **Smart Text:** Provides keypad when typing text.

QuickTranslator

Simply aim the camera of your smart phone at the foreign sentence you want to understand. You can get the real-time translation anywhere and anytime. You can buy additional dictionaries for offline translation from the Google Play Store.



1 From the Home screen tap the **Apps Key** > **QuickTranslator** .

2 Tap , **Word**, **Line** or **Block**.

3 Hold the phone toward the subject you want to translate for a few seconds.

NOTE

- Only one dictionary is provided free of charge. Additional dictionaries must be purchased. Please select the dictionary you would like to install as your complimentary dictionary.
- There may be a difference in the rate of recognization depending on the size, font, color, brightness and angle of the letters that need to be translated.

VuTalk

With the VuTalk feature, you can make an interactive and more creative notes with the other party. Visual communication is possible while sharing a photo, a map or camera preview.

NOTE

- Only available with a phone that supports this feature as well.
- You can also use the VuTalk feature during a call.
- The screen will lock if there is no input.
- Requires data connection. Data charge will

apply to both phones.

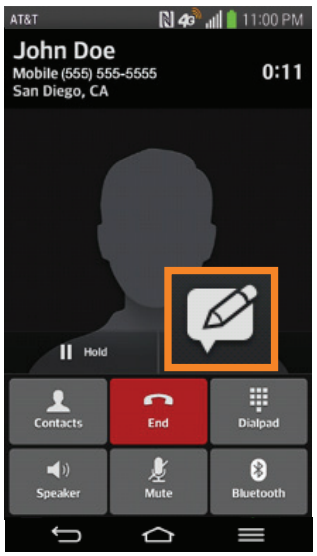
Register VuTalk Before Use

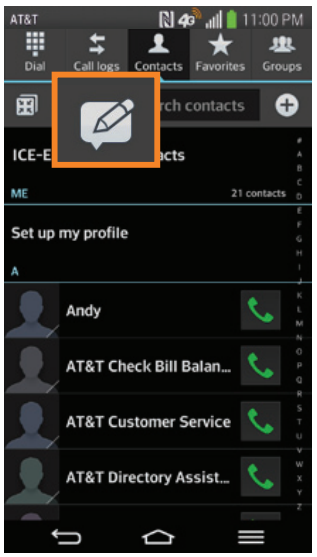
1 From the Home screen, tap the **Apps Key** > **Contacts**.

2 Tap to register for VuTalk.

NOTE

- You can also register VuTalk service while you are in a call by tapping .





3 Read the LG apps terms and conditions and privacy policy. If you agree, tap the check boxes, then tap **Accept** (if necessary).

VuTalk Settings

1 From the Home screen, tap the **Apps Key** > **Contacts**.

2 Tap the **Menu Key** > **VuTalk settings**.

3 Set the following options as your preferences.

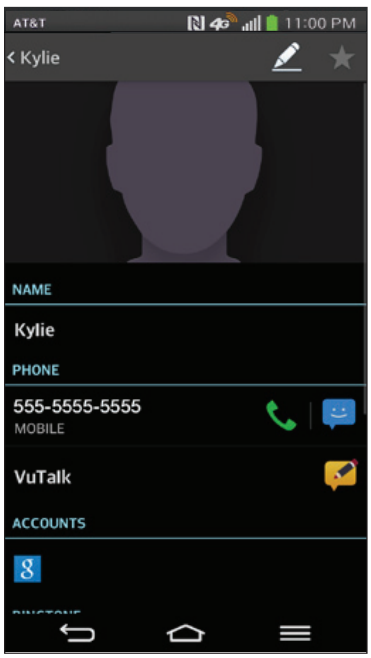
- **Notification sound:** Select the desired notification sound.
- **Vibrate:** Select the desired vibrate type.
- **Show request:** Checkmark this option to display a pop-up when a VuTalk request is received.
- **Contact sync:** Checkmark this option to sync contacts.

Communicate Visually with VuTalk

1 From the Home screen, tap the **Apps Key** > **Contacts**.

2 Tap to display only the contacts who use the VuTalk feature.

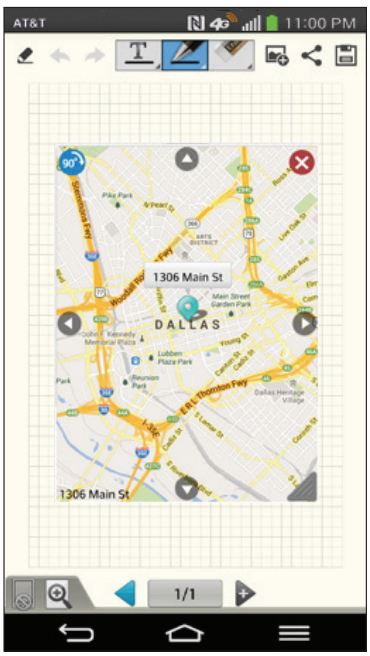
3 Tap a contact to start VuTalk with.



4 In the contact's details screen, tap . After the other party accepts your VuTalk request, you can start VuTalk with him/her.

5 Use the VuTalk screen to chat and visually communicate with your friend.

- Tap to attach a photo, take a new photo, map view, or a sticker.
- Tap the Pen icon and Eraser icon to write on the images you attached.



6 When you finish VuTalk, tap or the **Back Key** to exit the VuTalk feature. The created VuTalk screen is stored in the **Notebook** app.

NOTE

- If you tap the **Home Key** and go back to the Home screen, the VuTalk feature still runs in the background.

Voice Mate

Voice Mate allows you hands-free interaction with your devices. You can ask Voice Mate to perform phone functions using your voice, such as calling a contact, setting alarms or searching the web. When you access this feature for the first time, it displays help information to assist you in learning how to use this function.

NOTE

- You can use Voice Mate after agreeing the End User License Agreement and Privacy policy.
- You can view examples of various commands by swiping the Voice Mate main screen to the left.
- You can also launch Voice Mate by swiping upwards from the main keys area at the bottom of the screen.

Use Voice Mate

1 From the Home screen, tap the **Apps Key** > **Voice Mate** .

2 Tap the **Speak** icon to turn it on. Say what you want it to do for you.

TIP

- Use Voice Mate in a quiet environment so it can accurately recognize your commands

Voice Mate Settings

1 From the Home screen, tap the **Apps Key** > **Voice Mate** .

2 Tap the **Menu Key** > **Settings**.

- **Skip confirmation** - Tap to make a call without confirmation when the exact name or number searched for is found.
- **Language** - Choose a language to use.
- **Voice feedback** - Tap to allow voice feedback even when no headset is connected.
- **User name** - If a user name is set, Voice Mate will recognize the user name.
- **Save events to** - Set the account where you want to save events.
- **Voice activation** - Tap to allow the Speak button to activate by saying the voice launch command.
- **Button vibration** - Tap to allow the device to vibrate when the Speak button is tapped.
- **Voice launch command** - Set the voice launch command to LG Mobile or Hello Genie. Say this command to launch Voice Mate.
- **Voice launch when charging** - Tap to allow you to open Voice Mate while charging with the screen on.

- **Voice launch on Lock screen** - Tap to allow you to open Voice Mate on the Lock screen.
- **Skip Lock screen** - Tap to skip Face Unlock, Pattern, PIN or Password when opening Voice Mate via the voice launch command from the Lock screen.
- **Facebook** - Set the Facebook account.
- **Twitter** - Set the Twitter account.

Notebook

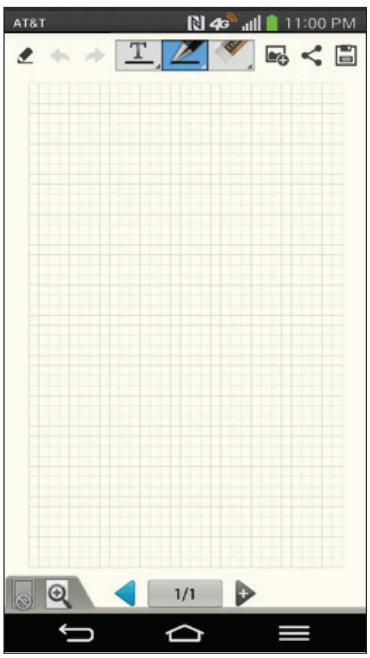
You can use the Notebook app to make your own notes using handwriting tools or attaching multimedia files. With the Notebook application, you can manage and personalize a wide variety of information.

Creating a note

1 From the Home screen, tap the **Apps Key** > **Notebook** .

2 Tap **New note** to create note.

3 Create a note using the available tools.



- / **Read only/Edit mode:** Tap to view the note in read-only mode and prevent any unintentional drawings. To go back to the Edit mode, tap .
- / **Undo/Redo:** Undo and redo the previous actions.
- **Text:** Tap to select the font type, size and color. Then tap any place where you want to enter text on the blank note to display the keyboard.
- **Pen:** Tap to select the pen type, thickness, opacity and color. Then draw a picture.
- **Eraser:** Tap to select the eraser. Tap **Clear all** to clear all edits.

- **Insert:** Tap to attach multimedia files. Choose from **Sticker, Image, Take photo, Video, Record video, Audio, Record voice, Location, Date and time,** and **Schedule**.
- Tap to send the note via Gmail, Email, or other apps.
- Tap to save the note.
- **Lock/Unlock Front Keys:** Tap to lock or unlock the front keys (, ,).
- **Zoom note:** Tap to open the zoom box for a detailed note. To close the zoom box, tap again.
- **Cover:** Tap to select the desired cover style.

SmartShare

SmartShare uses DLNA (Digital Living Network Alliance) technology to share digital content through a wireless network. Both devices must be DLNA certified to support this feature.
You can enjoy SmartShare feature on Gallery, Music, Video, and Polaris Viewer 5.

1 On the content you want to play or beam, tap .

2 Tap **Play** or **Beam** in the dialog box.

- **Play**: You can stream your content via TV, Bluetooth speaker, etc.
- **Beam**: You can send your content to Bluetooth devices or SmartShare Beam*-supported LG phones or tablets.
*SmartShare Beam quickly transfers multimedia contents through Wi-Fi Direct.

3 Tap the device to play or receive on the list.

- If the device is not on the list, make sure on the device that Wi-Fi, Wi-Fi Direct, or Bluetooth connection is turned on. Then tap **Rescan**.

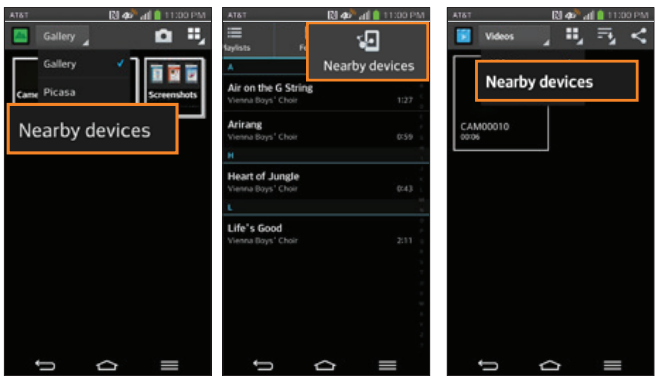
4 Tap **Send**.

Enjoy the Content from Nearby Devices

You can enjoy content from nearby devices, such as a computer or mobile device, on your phone by following the instructions below.

1 To connect the nearby devices to your phone, tap **Nearby devices** on the **Gallery**, **Music**, or **Videos** application as below.

< Gallery > < Music > < Videos >



- Ensure that your phone and nearby devices are connected to the same Wi-Fi network.
- Make sure DLNA feature on the nearby device is turned on.

2 Tap the device you want to connect to. If the device is not on the list, tap **Search nearby devices**.

3 After establishing a connection, you can enjoy the contents from the nearby device on your phone.

Setting the alarm

1 From the Home screen, tap the **Apps Key** and tap **Clock**.

2 To add a new alarm, tap the **Alarms** tab tab (if necessary).

3 Tap and set the alarm time.

4 Set any desired options and tap **Save**.

NOTE

- When viewing the alarms screen, tap the **Menu Key** > **Delete all** to delete all of the alarms or tap **Settings** to adjust the alarm settings.

Using the calculator

1 From the Home screen, tap the **Apps Key** and tap **Calculator**.

2 Tap the number keys to enter numbers.

3 For simple calculations, tap the function you want , followed by .

NOTE

- For more complex calculations, tap the **Menu Key**, then tap **Scientific calculator**.

Adding an event to your calendar

1 From the Home screen, tap the **Apps Key** and tap **Calendar**.

2 To view an event, tap the date. The events occurring on that date are displayed below the Calendar in Month view. Tap the event to view its details. If you want to add an event, tap at the top right corner of the Calendar.

3 Tap the **Event name** field and enter the event name. Check the date and enter the start and end time you want your event to begin and finish.

4 Tap the **Location** field to enter the location.

5 To add a note to your event, tap the **Description** field and enter the details.

6 To repeat the event, set **REPEAT** and **REMINDERS**, if necessary.

7 Tap **Save** to save the event in the calendar.

The event names will be displayed on the days of the events. An alarm will sound at the event start time if you set it.

Changing your calendar view

1 From the Home screen, tap the **Apps Key** and tap **Calendar**.

2 At the top of the Calendar, tap and choose from **Day, Week, Month, Year, Agenda,** or **Life Square.**

Task Manager

You can manage your applications using Task Manager. You can easily check the number of applications that are currently running and shut down certain applications.

Tasks

The Tasks application can be synchronized with your MS Exchange account. You can create a task, revise it, and delete it using your phone, or from MS Outlook or MS Office Outlook Web Access.

To Synchronize MS Exchange

1 From the Home screen, tap the **Apps Key** > **Settings** **> General** tab.

2 Tap **Accounts & sync** > **Add account**.

3 Tap **Microsoft Exchange**, then sign-in using your email address and password.

4 Checkmark the **Sync Tasks** checkbox.

Polaris Viewer 5

With Polaris Viewer 5, you can view document files on your phone. The Polaris Viewer 5 application supports the following file formats: txt, doc, docx, xls, xlsx, ppt, pptx, pdf.

Slide Aside

Slide Aside allows you to quickly switch between three open applications (or tasks) using a three finger gesture.

1 While an application is open, place three fingers on the screen and slide to the left. The current screen is saved and the Home screen appears.

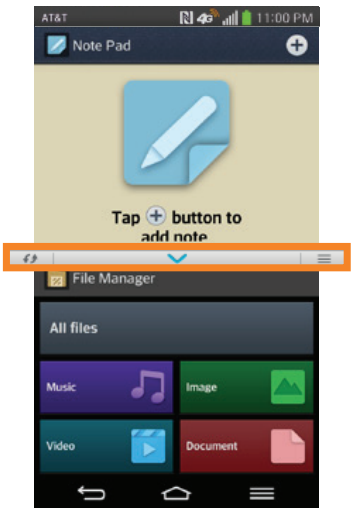
2 To re-open the saved apps, place three fingers on the screen and slide to the right. Tap the desired app you want to open.

Dual Window

The Dual Window feature splits the screen to enable multi-tasking, drag and drop interaction, auto-linking and recently used apps.

1 Touch and hold the **Back Key** to split the screen.

2 Touch or drag an app icon to the desired space.



- : Switch two screens.
- / : Drag to resize split screens.
- : Tap to view app the apps list, full screen view, or close the apps.

The Web

Browser

The Browser gives you a fast, full-color world of games, music, news, sports, entertainment, and much more, right on your mobile phone.

NOTE

- Additional charges apply when connecting to these services and downloading content. Check data charges with your network provider.

Using options

Tap the **Menu Key** to view the following options:

Refresh - Alows you to reload the current web page. When the page is currently loading, the option displayed is **Stop**.

New tab - Opens a new tab.

Bookmarks - Allows you to view, add, edit, and delete your bookmarks.

Save to bookmarks - Allows you to bookmark the current web page.

Homepage - Allows you to open the home page.

Set as homepage - Allows you to set the current web page as your home page.

History - Allows you to view the web pages you've visited.

Share page - Allows you send the web address (URL) of the web page to others.

Find on page - Allows you to search for text on the web page.

Desktop view - Allows you to change the current mobile page to a desktop page.

Save for offline reading - Allows you to save the current page for offline reading.

Capture plus - Allows you to capture the current web page from top to bottom without cutting.

Print - Allow you to print the web page using any printers on the network.

Settings - Opens the Browser settings.

Exit - Allows you to exit the browser.

TIP

- To return to the previous web page, tap the **Back Key**.

Adding bookmarks

1. When viewing the page you want to save, tap the **Menu Key** > **Save to bookmarks**.
2. Tap and select in which account to bookmark the web page.
3. Enter the desired information for **Label**, **Address**, and **Add to** (location to save

bookmark) and tap **OK**.

OR

1 Tap at the top right corner of the browser, then tap .

2 Tap , select in which account to bookmark the web page, then tap .

3 Enter the desired information for **Label**, **Address**, and **Add to** (location to save bookmark) and tap **OK**.

Changing the Browser settings

1 Open the Browser and tap the **Menu Key** > **Settings**.

2 Set any of the available options.

Settings

The Settings application contains most of the tools for customizing and configuring your phone. All of the settings in the Settings application are described in this section.

To open the Settings application

- From the Home screen, tap the **Apps Key** > **Settings** .
- From the Home screen, tap the **Menu Key** > **All settings**.

TIP

- If you would like to view the settings menu in a list, access Settings and tap the **Menu Key** > **Switch to list view**. The options below follow the default tab view and may differ when in list view.

Networks tab

Airplane mode

Airplane mode allows you to quickly turn off all wireless connections.

1 From the Home screen, tap the **Menu Key** > **All settings**.

2 Select the **Networks** tab.

3 Tap the **Airplane mode** switch to turn it on.

4 Tap the switch again to turn it off.

OR

1 Press and hold the **Power/Lock Key** and tap **Turn on Airplane mode**.

2 Press and hold the **Power/Lock Key** and tap **Turn off Airplane mode** to turn it off.

Wi-Fi

To use Wi-Fi on your phone, you need access to a wireless access point, or "hotspot." Some access points are open and you can simply connect to them. Others are hidden or implement other security features, so you must configure your phone in order to connect to them.

Turn on Wi-Fi

From the Home Screen, open the Notifications panel and tap to turn Wi-Fi on. A blue colored icon indicates that Wi-Fi is on.

OR

From the Home screen, tap the **Menu Key** and tap **All settings** > **Networks** tab. Then tap the **Wi-Fi** switch to turn it on.

To connect to a Wi-Fi Network

1 From the Home screen, tap the **Menu Key** and tap **All settings** > **Networks** tab > **Wi-Fi**.

2 Tap the **Wi-Fi** switch to turn it on and begin scanning for available Wi-Fi networks.

- A list of available Wi-Fi networks will be displayed. Secured networks are indicated by a lock icon .

3 Tap a network to connect to it.

- If the network is open, you are prompted to confirm that you want to connect to that network by tapping **Connect**.
- If the network is secured, you are prompted to enter a password or other credentials. (Ask your network administrator for details).
- Tap the **Menu Key** to access additional options.

4 The Status Bar at the top of your screen will display an icon that indicates your Wi-Fi connection status.

Turn off Wi-Fi when you're not using it to extend the life of your battery.

TIP

- If you are not in range of a Wi-Fi network and use a network connection, additional data charges may apply.

NOTE

- Access to the Internet and a wireless router required. As an added convenience, AT&T has shipped certain smartphones with Wi-Fi enabled as a default setting. Leaving Wi-Fi enabled when not connected to a Wi-Fi network may affect battery charge. Qualifying data plan required.
- This device supports WEP, WPA/WPA2-PSK and 802.1x EAP. (Some EAP methods are not supported.) If your Wi-Fi service provider or network administrator sets encryption for network security, enter the key in the pop-up window. If encryption is not set, this pop-up window will not be shown. You can obtain the key from your Wi-Fi service provider or network administrator.

Bluetooth

Bluetooth is a short-range communications technology that allows you to connect wirelessly to a number of Bluetooth

devices, such as headsets and hands-free car kits, and Bluetooth-enabled handhelds, computers, printers, and wireless devices. The Bluetooth communication range is usually up to approximately 30 feet.

Turn on Bluetooth

From the Home screen, tap the **Menu Key** > **All settings** > **Networks** tab, then tap the **Bluetooth** switch to turn on the Bluetooth functionality.

To make your phone visible to other devices

1 From the Home screen, tap the **Menu Key** > **All settings** > **Networks** tab > **Bluetooth**.

2 Make sure Bluetooth is turned on.

3 Tap the checkbox next to the device name. Visibility is set to 2 minutes by default.

NOTE

- To change the visibility time length, tap the **Menu Key** > **Visibility timeout**. Choose from **2 minutes**, **5 minutes**, **1 hour**, or **Never time out**.

To search for other Bluetooth devices

1 Access the Bluetooth menu and make sure that it is on.

2 Tap **Search for devices**.

NOTE

- To find other devices, place them in discoverable mode.

Pairing Bluetooth devices

1 Access the Bluetooth menu and make sure that it is on.

2 Tap **Search for devices**. Your device will display a list of discovered in-range Bluetooth devices.

3 Tap the device you want to pair from the list.

4 Depending on the device, you might have to tap **Pair** to accept the passkey (if they match), enter a passkey or PIN Code, or the devices will automatically pair.

NOTE

- Pairing between two Bluetooth devices is a one-time process. Once a pairing has been created, the devices will continue to recognize their partnership and exchange information.

TIP

- Please consult documentation included with Bluetooth device for information on

pairing mode and passcode (typically 0 0 0 0 – four zeroes).

How to send data from your phone via Bluetooth

You can send data via Bluetooth by running a corresponding application, not from the Bluetooth menu.

- **Sending pictures**: Open the **Gallery** application and tap a picture. Then tap > **Bluetooth**. Check the devices if Bluetooth is turned on. Then tap the device you want to send data to from the list.
- **Sending contacts**: Open the **Contacts** application. Tap the contact you want to share, then tap the **Menu Key** > **Share** > **Bluetooth**. Check if Bluetooth is turned on and tap **Search for devices**.Then tap the device you want to send data to from the list.

TIP

- The supported Bluetooth version is Bluetooth 4.0 and certified by Bluetooth SIG. It is compatible with other Bluetooth SIG certified devices.
- Due to different specifications and features of other Bluetooth-compatible devices, display and operations may be different, and functions such as transfer or exchange may not be possible with all Bluetooth compatible devices.
- Supported profiles are HFP/HSP, A2DP, AVRCP, OPP, FTP(Server), HID, PAN, MAP, SPP and PBAP.

To switch between a Bluetooth headset and the phone

When a Bluetooth headset is paired and connected to your phone, you can conduct calls on the headset for hands-free conversation. During a call, you can opt to use the Bluetooth headset or just the phone. When using the Bluetooth headset during a call, the Ongoing Call notification icon is blue in the Status Bar (the icon is green when using the phone).

NOTE

- Tap the Bluetooth button to switch the call from the phone to the Bluetooth device, or vice versa.

Data Manager

You can select whether to enable or disable mobile data. You can check the current data usage, set to enable/

disable mobile data, or set the mobile data limit. Your mobile data connection will be disabled when the specified limit is reached.

Mobile data - Tap the switch to enable mobile data.

Limit mobile data usage - Checkmark to set the mobile data usage limit.

Data usage cycle - Allows you to change the data usage cycle to display in the graph.

NOTE

- Tap an application to view data usage information.

Call

Configure phone call settings such as call forwarding and other special features offered by your carrier.

Voicemail – Allows you to select your carrier's voicemail service.

Fixed dialing numbers – Turn on and compile a list of numbers that can be called from your phone. You'll need your PIN2, which is available from your operator. Only numbers within the fixed dial list can be called from your phone.

Caller ID - Allows you to choose how to display your number in outgoing calls.

Incoming call pop-up – Displays an incoming call popup when an app is in use.

Call reject – Allows you to set call rejection and manage the reject list.

Decline with message – When you want to reject a call, you can send a quick message instead. This is useful if you need to reject a call during a meeting. This menu allows you to manage the messages you can send.

Privacy keeper – Hides the caller name and number for an incoming call.

Auto answer – Sets the time before a connected hands-free device automatically answers an incoming call. Choose from Disable, 1 second, 3 seconds, and 5 seconds.

Connection vibration – Vibrates your phone when the other party answers the call.

TTY mode - Allows you to activate TTY mode.

Hearing aids - Allows you to turn on hearing aid compatibility.

Noise suppression - Suppress background noise in call.

Voice Enhancement – You can set the phone to enhance voice clarity in noisy environments so you can hear more clearly.

Power button ends call – Allows you to end the call by pressing the Power/ Lock Key.

Call duration – View the duration of calls including last call, all calls, outgoing calls and incoming calls.

Sound settings - Allows you to control the sounds on the phone.

Additional settings – Allows you to change the following settings:

Call forwarding: Allows you to set the call forwarding options.

Call waiting: If call waiting is activated, the handset will notify you of an incoming call while you are on a call (depending on your network provider).

Share & connect

Allows you to transfer data and media with other devices.

NFC

NFC (Near Field Communication) is a wireless technology that enables data transmission between two objects when they are brought within a few inches of each others. When you enable NFC on your phone, your phone can exchange data with other NFC-enabled devices or read information from smart tags embedded in posters, stickers, and other products.

To turn on NFC:

1 From the Home screen, tap the **Menu Key** > **All settings**.

2 Tap **Share & connect** and tap the **NFC** switch OFF ON.

Direct/Android Beam

When this feature is turned on, you can beam app content to another NFC-capable device by holding the devices close together. For example, you can beam Browser pages, YouTube videos, contacts, and more. Just bring the devices together (typically back to back) and then touch your screen. The app determines what gets beamed.

To activate Direct/Android Beam:

From the Home screen, tap the **Menu Key** > **All settings** > **Share & connect** > **Direct/Android Beam** .

NOTE

- You must enable NFC to activate Direct/Android Beam.

SmartShare Beam

Allows you to receive multimedia content from LG phones or tablets.

To activate SmartShare Beam:

From the Home screen, tap the **Menu Key** > **All settings** > **Share & connect** > **SmartShare Beam**. Then tap the switch to activate SmartShare Beam and set the desired options.

NOTE

- You must enable Wi-Fi to activate SmartShare Beam.

Miracast

You can mirror phone screen and sound onto LG Miracast dongle or TV wirelessly.

1. From the Home screen, tap the **Menu Key** > **All settings**.
2. Tap the **Networks** tab.
3. Tap **Share & connect** > **Miracast**.
4. Tap the switch to turn on the feature.
5. Turn on the Miracast feature on your TV or connect to the LG Miracast dongle.

TIP

- To start the Miracast feature quickly, tap the Miracast icon in the Notifications Panel. While mirroring, Mobile Hotspot cannot be used simultaneously.

Wireless storage

To manage files on your phone in the computer or copy files to the phone from the computer without a USB connection.

1. Make sure that the phone and computer are connected to the same network.
2. Tap to activate Wireless storage.
3. Enter the URL shown on your phone in the address bar of the browser on your computer.

Tethering & networks

Allows you to configure mobile networks, tethering, and VPNs (Basic VPN, LG VPN).

Mobile Hotspot

You can also use your smartphone to provide a mobile broadband connection

for up to 8 other devices. Create a hotspot and share your connection. To create a portable hotspot, from the Home screen, tap the **Menu Key** > **All settings** > **Networks** tab > **Tethering & networks** > **Mobile Hotspot**. Then tap the **Mobile Hotspot** switch to activate the feature. Tap **Set up Mobile Hotspot** to change the SSID, password, security type, and other hotspot options.

NOTE

- Mobile Hotspots requires an appropriate DataPro data plan. Devices connected to your Mobile Hotspot use data from your DataPro plan. Plans are not unlimited and significant charges may be incurred if the included data allowance is exceeded. Performance may vary depending on the number of devices connected and other factors. If you do not use a password, others will be able to use your Mobile Hotspot connection.

Bluetooth tethering

Bluetooth tethering allows you to connect other devices to your phone via Bluetooth.

To share your connection via Bluetooth tethering:

From the Home screen, tap the **Menu Key** > **All settings** > **Networks** tab > **Tethering & networks**. Then tap the **Bluetooth tethering** switch to turn the function on.

NOTE

- Bluetooth tethering can be activated only when your smartphone is connected to the AT&T network.

Help

Tap to view help information about the Mobile Hotspot and Bluetooth tethering functions.

Mobile networks

You can set whether to enable or disable data access on your phone.

Data enabled - Select whether to enable or disable data access.

International data roaming - Select whether to enable or disable data access while international roaming.

Access point names - You can select the access point name, add a new APN, or reset to default.

Network operators - Allows you to select a network operator (if necessary).

Search for AT&T MicroCell - You can search and register an AT&T MicroCell in order to use it.

VPN

From your phone, you can add, set up, and manage virtual private networks (VPNs) that allow you to connect and access resources inside a secured local network, such as your corporate network.

Prepare Your Device for VPN Connection

Depending on the type of VPN you are using at work, you may be required to enter your login credentials or install security certificates before you can connect to your company's local network. You can get this information from your network administrator. Before you can initiate a VPN connection, you must set the screen lock option (Pattern, PIN, or Password only).

Add a Basic VPN Connection

The Basic VPN menu allows you to use the built-in Android VPN client supporting basic features.

1 From the Home screen, tap the **Menu Key** > **All settings**.

2 Select the **Networks** tab.

3 Tap **Tethering & networks** > **VPN** > **Basic VPN > Add Basic VPN profile.**

NOTE

- You must change your screen lock before you use credential storage. You can set a pattern, PIN, or password.

4 Enter the VPN network according to the security details you have obtained from your network administrator.

5 When finished, tap **Save**.

Add a LG VPN Connection

The LG VPN menu allows you to use the advanced LG VPN client supporting full IPSec features and interoperability.

1 From the Home screen, tap the **Menu Key** > **All settings**.

2 Select the **Networks** tab.

3 Tap **Tethering & networks** > **VPN** > **LG VPN** > **Add LG VPN network**.

NOTE

- You must set the local key store password before you use LG VPN credential storage.

4 Enter the VPN network according to the security details you have obtained from your network administrator.

5 When finished, tap **Save**.

Sound tab

Sound profile

Allows you to set the sound profile to Sound, Vibrate only, or Silent.

Volumes

Adjust the phone's volume settings to suit your needs and your environment.

Vibrate strength

Allows you to set the vibrate strength for calls, notifications, and touch feedback.

Quiet mode

Tap the switch

to enable this function. Tap **Quiet mode** to open a screen to set the days and times to automatically turn off all sounds except for alarms and media and to set allowed calls during the quiet mode.

Phone ringtone

Select the ringtone for incoming calls.

Smart ringtone

Select to automatically increase the volume of the ringtone when outside noise is loud.

Incoming call vibration

Allows you to choose the type of vibration for incoming calls.

Gentle vibration

Gradually increases vibration up to the current strength set.

Ringtone with vibration

Checkmark for vibration feedback for calls.

Voice notifications

Read out incoming call and message event automatically.

Default notification sound

Select the ringtone for notifications such as new messages receipt or calendar events.

Touch feedback & system

Allows you to set dial pad touch tones, touch sounds, screen lock sound, and vibrate on touch.

Dial pad touch tones

Allows you to play tones when using the dial pad.

Touch sounds

Allows you to play a sound when making a screen selection.

Screen lock sound

Allows you to play a sound when locking and unlocking the screen

Vibrate on touch

Allows you to vibrate when tapping the front key and on certain UI interactions.

Display tab

Home screen

Select Home - Sets the home style for your device. Choose **Home** or **EasyHome**.

Theme - Sets the screen theme for your device. Choose **Flex** or **LG**.

Wallpaper - Allows you to set the Home screen wallpaper.

Screen swipe effect - Choose the desired type of effect to display when you swipe from one Home screen canvas to the next.

Allow Home screen looping - Allows you to select the type of effect to display when you swipe from one Home screen canvas to the next.

Portrait view only - Select to display the Home screen always in portrait view.

Home backup & restore - Select to backup and restore app/widget configurations.

Help - Touch to get information on using the Home screen of your device.

Lock screen

Select screen lock - Select the desired option to secure your phone from the below.

None - No lock screen.

Swipe - Swipe any part of the screen to unlock screen.

Face Unlock - Unlocks the screen through facial recognition. Follow the prompts. You are asked to select Pattern and/or PIN as a backup.

Pattern - Allows you to set a pattern as your screen lock. It's recommended that you enter a backup PIN as well in case you forget the pattern.

PIN - Enter a numeric PIN to unlock the screen.

Password - Enter a password to unlock the screen.

Swing Lock screen - If this option is checked, you can enjoy seeing the wallpaper on the lock screen pan vertically in the direction you tilt the phone.

Screen swipe effect - Select the screen effect you want to use when unlocking the screen.

Weather animation - Show weather animation for current location or primary city set in the Weather app.

Wallpaper - Select the wallpaper to display for your lock screen.

Shortcuts - Customize shortcuts on the lock screen.

1 From the Home screen, tap the **Menu Key** > **All settings** > **Display** tab, then tap the **Lock screen** > **Shortcuts.**

2 Select the app you want to add as a shortcut on the Lock screen.

Owner info - Display the owner info on the lock screen. Tap to set the desired information.

Lock timer - Allows you to set the amount of time before the screen automatically locks after the screen has timed-out.

Power button instantly locks - Checkmark to instantly lock the screen when the **Power/Lock Key** is pressed.

Front touch buttons

Configure the front touch buttons options.

Button combination - Select the desired front touch button combination.

Color - Select the color of the front touch buttons.

Transparent background - Select to use a transparent background on the front touch buttons area.

Swipe front touch buttons - If you checkmark this option, you can adjust the area of the front touch buttons for one-handed operation by swiping the front touch buttons area to the left or right

Hide front touch buttons - Checkmark each app to set the front touch buttons

hidden when the app is launched.

Brightness

Adjust the screen brightness by using the slider. Tap **Auto** to set the brightness to automatically change.

Screen timeout

Set the time delay before the screen automatically turns off.

Screen-off effect

Set the screen off effect used when the screen turns off.

Auto-rotate screen

Set to switch orientation automatically when you rotate the phone.

Screen mode

Select the desired screen mode between **Standard**, **Vivid**, and **Natural**.

Daydream

Select the screensaver to display when the phone is sleeping while docked and/or charging.

Font type

Select the desired font type.

Font size

Select the desired font size.

Smart screen

Checkmark this option to keep screen on when the phone detects your face looking at the screen.

Smart video

Checkmark this option to pause videos while playing automatically when the phone detects you are not looking at the screen.

Notification LED

Select which type of notifications to display the front or back side LEDs for.

Auto-adjust screen tone

Checkmark this option to save battery power by adjusting the screen brightness automatically with analysis of image color.

Screen capture area

Allows you to adjust the area captured by a screen shot. Choose between **Capture full screen** and **Capture part of screen**.

TIP

- Press and hold the **Volume Down Key** and the **Power Key** at the same time to capture the screen.

Aspect ratio correction

Change the resolution size of downloaded applications to fit the screen size.

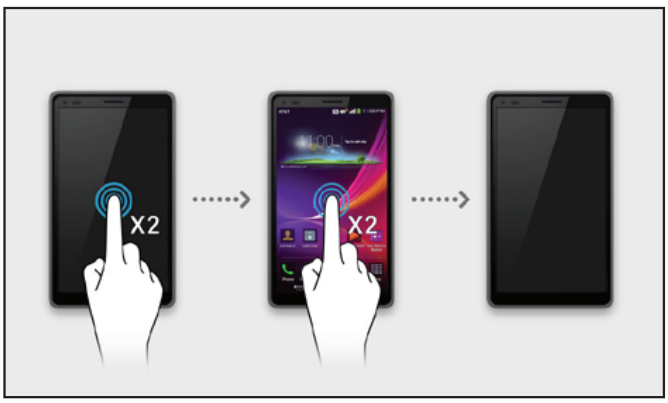
General tab

Gestures

Screen on/off - You can set the phone to turn the screen on by quickly double-tapping the screen. Tap an empty area in the Home screen, Status Bar, and Lock screen to turn the screen off.

NOTE

- This feature is also available when using the QuickWindow case.



Answer an incoming call - During an incoming call, bring the phone to your ear to accept the incoming call.

NOTE

- If the proximity sensor is covered by something, the device might perform an incorrect action.

Fade out ringtone - During an incoming call, pick up the phone from the flat surface to fade out the ringtone.

NOTE

- If the proximity sensor is covered by something, the device might perform an incorrect action.

Silence incoming calls - Flip the device to silence incoming calls.

Snooze or turn off alarm - Flip the device to snooze or stop the alarm.

Pause video - Flip the device to pause

the video.

Move Home screen items - Touch and hold an item and tilt the device to move it to other Home screen panels.

Help - Touch to get information on using the Gesture functions of your device.

Motion sensor calibration - Improve the accuracy of the tilt and speed of the sensor.

One-handed operation

Allows you to adjust the position of the dial keypad, LG keyboard, or lock screen to the left or right side of the screen to easily use it with one hand.

Dial keypad - Checkmark to adjust the position of the dial keypad.

LG keyboard - Checkmark to adjust the position of the LG keyboard.

Gesture control - Allows you to swipe the keyboard to the left or right to adjust the position of the LG keyboard.

Lock screen - Checkmark to adjust the position of the the PIN entry.

Swipe front touch buttons - Checkmark to swipe the front touch buttons left or right to adjust the position of the buttons.

Help - Displays help information for each available option.

Storage

You can monitor the used and available internal memory in the device.

Battery

See how much battery power is used for device activities. The battery level displays in a percentage. The remaining time of use is also displayed.

Battery percentage on status bar - Displays the battery percentage on the Status Bar.

Battery saver

Tap the switch

to turn this feature on or off. Tap **Battery saver** for the following options.

Turn Battery saver on: Select the level at which you want to turn on the Battery saver function.

Auto-sync: Turns off Auto-sync.

Wi-Fi: Turns off Wi-Fi if data is not in use.

Bluetooth: Turns off Bluetooth if it's not connected to a device.

Vibrate on touch: Turns off touch

feedback.

Brightness: Adjusts the brightness.

Auto-adjust screen tone: Turns on auto-adjust screen tone.

Screen timeout: Adjusts the screen timeout.

Notification LED: Turns off the notification LED.

Help - Touch to access some tips for the Battery saver function.

Apps

You use the Apps settings menu to view details about the applications installed on your phone, manage their data, or force them to stop. Tap the **DOWNLOADED, RUNNING** or **ALL** tabs to view information about your installed apps.

Multitasking

This menu allows you to enable various useful features for multitasking. Checkmark each feature to enable it. Tap **Help** to view help information for multitasking features.

Accounts & sync

Use the Accounts & sync settings menu to add, remove, and manage your Google and other supported accounts. You also use these settings to control how and whether all applications send, receive, and sync data on their own schedules and whether all applications can synchronize user data automatically. Gmail™, Calendar, and other applications may also have their own settings to control how they synchronize data; see the sections on those applications for details. Touch **Add account** to add new account.

Guest mode

Use Guest mode when you let someone else use your phone. They will only be able to use the applications that you've selected. Once you set it up, you can easily put your phone in Guest mode by drawing the guest pattern on the Lock screen that you set, which is different from your normal unlock pattern.

NOTE

- To use Guest mode, set the Lock screen to pattern lock. Guest can also use apps not pre-selected but linked to pre-selected apps.

Location access

Use the Location access menu to set your preferences for using and sharing your location when you search for information and use location-based applications, such as Maps. Tap the switch to enable the location sources.

GPS satellites - Checkmark to enable your phone's standalone global positioning system (GPS) satellite receiver to pinpoint your location to within an accuracy as close as several meters ("street level"). Actual GPS accuracy depends on a clear view of the sky and other factors.

Wi-Fi & mobile network location - Allows apps to use Google's location service to estimate your location faster. Anonymous location data will be collected and sent to Google.

Security

Use the Security menu to configure how to help secure your phone and its data.

Encrypt phone - Allows you to encrypt data on the phone for security. You will be required to enter a PIN or password to decrypt your phone each time you power it on.

Set up SIM card lock - Allows you to set if you want to require a PIN to use or, if set, allows you to change the PIN.

Password typing visible - Checkmark to briefly show each character of passwords as you enter them so that you can see what you enter.

Phone administrators - Add or remove phone administrators.

Unknown sources - Allow installation of non-Play Store applications.

Verify apps - Disallow or warn before installation of apps that may cause harm.

Trusted credentials - Checkmark to allow applications to access your phone's encrypted store of secure certificates and related passwords and other credentials. You use credential storage to establish some types of VPN and Wi-Fi connections. If you have not set a password for the secure credential storage, this setting is dimmed.

Install from storage - Touch to install a secure certificate.

Clear credentials - Deletes all secure certificates and related credentials and erases the secure storage's own

password.

Language & input

Select the language for the text on your phone and for configuring the on-screen keyboard, including words that you've added to its dictionary.

Language - Choose a language to use on your phone.

Spelling correction - Allows spelling correction when using the on-screen keyboard.

Personal dictionary - Allows you to view, edit, and add words to your personal dictionary.

Default - Allows you to select the default keyboard type.

Checkmark the keyboard you want to use from **Android keyboard (AOSP)**, **Google voice typing**, and **LG Keyboard**. Tap ⚙ to configure each keyboard's settings.

Voice Search - Touch to configure the Voice Search settings.

Text-to-speech output - Touch to set the preferred engine or general settings for text-to-speech output.

Pointer speed - Adjust the pointer speed.

Backup & reset

Backup my data - Back up app data, Wi-Fi passwords, and other settings to Google servers.

Backup account - Displays the account that is currently being used to back up information.

Automatic restore - When reinstalling an app, restore backed up settings and data.

LG Backup service - Backs up all information on the device and restores it in the event of data loss or replacement. For more information, tap the **Menu Key** ☰ > **Help**.

Factory data reset - Erases all data on the phone, except as follows. In the event of device failure or error, your device may record in an error log information about the device's status at the time of the error event. The information recorded in the error log may include data about application names and usage, cell phone location and number, GPS status, memory usage and other non-personal device

status information. This information is stored on your phone, and can only be accessed by LG if the phone is physically returned to LG for repair and service The error log information is used by LG only to diagnose, repair, and improve LG's products and services.

Browser Bar

The Browser Bar at the bottom of the Browser enhances your mobile browsing experience with contextual recommendations, social networking applications and browser utilities. We've included some buttons to get you started and have made it easy to add more buttons, move or remove them. To display the Browser Bar, touch and drag the tab upwards.

TIP

- You must enable the **Toolbar** and **Active Browsers** options to activate the Browser Bar.

Date & time

Set your preferences for how the date and time is displayed.

Accessibility

Use the Accessibility settings to configure any accessibility plug-ins you have installed on your phone.

NOTE

- Requires additional plug-ins to become selectable.

TalkBack - Allows you to set up the TalkBack function which assists people with impaired vision by providing verbal feedback. Tap the switch the top right corner of the screen to turn it on. Tap **Settings** at the bottom of the screen to adjust the TalkBack settings.

Install web scripts - Allows you to enable (or disable) installation of web scripts.

Large text - Checkmark to increase the size of the text.

Invert color - Sets the color contrast for better screen viewing. Tap the switch at the top right corner of the screen to turn it on. Then tap the screen and drag across the screen in any direction until you see the color contrast you want to use.

Magnification gestures - When this feature is turned on, you can zoom in and out by triple-tapping the screen.

Shades - Set the screen to be shade of black.

Mono audio - Checkmark to allow headset sound to be routed to both the right and left channel. To manually set the audio route, move the slider on the mono audio slide bar.

Touch & hold delay - Sets the touch and hold delay (short, medium, or long).

Universal touch - Tap the switch to toggle it On or off. On allows you to replace the hardware keys with a Universal touch board .Tap the Universal touch icon to access the Power, Home, Volume down, Volume up, and Pinch buttons. Draw a "C" on the board to automatically display the Dial tab. Draw an "M" on the board to automatically display the Messaging application. Draw a "W" on the board to automatically launch the Chrome application.

Auto-rotate screen - Checkmark to allow the device to rotate the screen depnding on the device orientation (portrait or landscape).

Speak passwords - Checkmark so that you can say your log in passwords (instead of typing your passwords).

Power button ends call - Checkmark so that you can end voice calls by pressing the Power/Lock Key. When this option is enabled, pressing the Power/Lock Key during a call does not lock the screen.

Easy access - Turning this feature on allows you to activate an accessibility feature by tapping the **Home Key** three (3) times. Choose from **Off, Show all, TalkBack, Invert color, Universal touch**, and **Accessibility settings**.

Text-to-speech output - Text-to-speech output provides audible readout of text, for example, the contents of text messages, and the Caller ID for incoming calls.

PC connection

Select USB connection method - Opens a dialog box to choose the default connection mode when connecting your phone to a PC via USB. Choose from **Charge phone, Media sync (MTP), Tethering, PC software,** or **Send images (PTP)**.

Tethering

You can use your phone to provide a data connection to a computer by activating data tethering and connecting them with a USB cable.

To tether your phone with your computer using the USB

1 Connect your phone to your computer with a USB cable.

2 The USB connection type prompt is displayed. Tap **Tethering** to confirm.

NOTE

- Data Tethering requires an appropriate DataPro data plan. Devices connected by tethering use data from your DataPro plan. Plans are not unlimited and significant charges may be incurred if the included data allowance is exceeded. Performance may vary depending on the number of devices connected and other factors.

Ask upon connecting - Checkmark to have the phone ask you to choose which USB connection mode it should connect with to a PC.

Help - Touch to get information on the different types of USB connections.

PC Suite - Allows you to use a Wi-Fi connection to transfer music and images between a computer and your phone. Refer to page 103 for more information.

On-Screen Phone - Turns the On-Screen Phone function on so that you can receive Wi-Fi connection requests. Refer to page 101 for information about LG On-Screen Phone.

Help - Displays help information for the PC Suite and On-Screen Phone functions.

Accessory

QuickWindow case - Activate to make features, such as music, weather, and clock, available in small view when using the QuickWindow case.

USB storage - Sets the Plug & Pop feature for USB storage. Tap

to enable this feature and automatically display the app panel when connecting an OTG (On-the-Go) USB cable. Checkmark the applications you want to make available.

Earphone - Sets the Plug & Pop feature for earphones. Tap

to enable this feature and automatically display the

app panel when connecting an earphone. Checkmark the applications you want to make available.

About phone

View legal information, check phone status and software versions, and perform a software update.

Regulatory and Safety Information

To view regulatory and safety information, tap the **Menu Key** from the Home screen, then tap **All settings** > **About phone** > **Regulatory and Safety**.

LG On-Screen Phone

LG SOFTWARE

On-Screen Phone allows you to remotely control your mobile phone from a PC via a USB and Wi-Fi connection. You can also control your mobile phone from your PC using the mouse or keyboard.

On-Screen Phone icons

- Changes the On-Screen Phone preferences.
- Connects your mobile phone to your PC, or disconnects it.
- Minimizes the On-Screen Phone window.
- Maximizes the On-Screen Phone window.
- Exits the On-Screen Phone program.

On-Screen Phone features

- **Real-time transfer and control**: Displays and controls your mobile phone screen when connected to your PC.
- **Mouse control**: Allows you to control your mobile phone by using the mouse to click and drag on your PC screen.
- **Text input with keyboard**: Allows you to compose a text message or note using your computer keyboard.
- **File transfer (mobile phone to PC)**: Sends a file from your mobile phone (e.g. Gallery, Video Player, and Music) to your PC. Simply right-click on the file and drag it to send it to your PC.
- **File transfer (PC to mobile phone)**: Sends files from your PC to your mobile phone. Just select the files you wish to transfer and drag and drop them into the On-Screen Phone window. The sent files are stored in the OSP folder.

NOTE

- Please make sure that LG Home is the default launcher.

- **Real-time event notifications**: Prompts a pop-up to inform you of any incoming calls or text messages, as well as alarm and event notifications.

How to install On-Screen Phone on your PC

Visit **LG.com** (http://www.lg.com/us). Locate the search box in the upper right corner and enter the model number. From

the **SUPPORT** list, select your model. Scroll down and select the **OSP** tab and click on **DOWNLOAD**. When prompted, select **Run** to install On-Screen Phone on your PC.

How to connect your mobile phone to your PC

On-Screen Phone provides, USB, and Wi-Fi connection. Please follow the instructions on the Connection Wizard of the On-Screen Phone program.

NOTE

- To use On-Screen Phone using Wi-Fi connection, from the Home screen tap the **Menu Key** > **All settings** > **General** tab > **PC connection** > **On-Screen Phone** checkbox is selected.
  Please make sure that the battery may run out more quickly due to the current consumption if On-Screen Phone is connected via Wi-Fi.
  When you connect your mobile phone to your PC via Mobile Hotspot and access to the Internet on the PC, additional data charges may be incurred depending on your DataPro data plan.
  Access to the Internet using Wi-Fi networks may not work well depending on the network's traffic. When you enlarge the On-Screen Phone window, the display on the screen might become slow.

To check the phone-to-PC connection

Once the devices have been connected, drag the Status Bar down to check the On-Screen Phone connection status.

To disconnect your phone from your PC

Click in the top left of the On-Screen Phone window. Alternatively, drag the Status Bar down and select **On-Screen Phone connected** > **OK**.

LG PC Suite

LG PC Suite helps you manage media contents and applications in your phone by allowing you to connect to your phone to your PC.

With the LG PC Suite software, you can...

- Manage and play your media contents (music, movie, picture) on your PC.
- Send multimedia contents to your device.
- Backup the applications in your device.
- Update your device's software.
- Play multimedia contents of your PC from your device.
- Backup, create, and edit the memos in your device.

NOTE

- You can use the Help menu from the application to find out how to use the LG PC Suite software.

Installing the LG PC Suite Software

To download the LG PC Suite software, please do the following:

1 Go to www.lg.com/us.

2 Go to **SUPPORT** > **MOBILE SUPPORT** > **PC Sync**

3 Select the model information and click **GO**.

4 Scroll down, select the **PC Sync** tab and click **DOWNLOAD** to download LG PC Suite.

System Requirements for LG PC Suite software

- OS: Windows XP (Service pack 3) 32bit, Windows Vista, Windows 7, Windows 8
- CPU: 1 GHz or higher processors
- Memory: 512 MB or higher RAMs
- Graphic card: 1024 x 768 resolution, 32 bit color or higher
- HDD: 500 MB or more free hard disk space (More free hard disk space may be needed depending on the volume of data stored.)
- Required software: LG integrated drivers, Windows Media Player 10 or later.

NOTE

- **LG Integrated USB Driver**
  The LG integrated USB driver is required to connect an LG device and PC. It is installed automatically when you install the LG PC Suite software application.

Software Update

Phone Software Update

This feature allows you to update the firmware of your phone to the latest version conveniently from the internet without the need to visit a service center.

For more information on how to use this function, please visit:

http://update.lgmobile.com or

http://www.lg.com/common/ index.jsp.

As the mobile phone firmware update requires the user's full attention for the duration of the update process, please make sure to check all instructions and notes that appear at each step before proceeding. Please note that removing the USB cable or battery during the upgrade may seriously damage your mobile phone.

LG Mobile Phone Software update via Over-the-Air (OTA)

This feature allows you to update the firmware of your phone to the newer version conveniently via OTA without connecting the USB data cable. This feature is only available if and when LG makes the newer version of the firmware available for your device.

First, you can check the software version on your mobile phone:

From the Home screen, tap the **Menu Key** > **All settings** > **General** tab > **About phone** > **Software information**.

To perform the phone software update, from the Home screen, tap the **Menu Key** > **All settings** > **General** tab > **About phone** > **Software Update** > **Update now**.

NOTE

- Your personal data—including information about your Google account and any other accounts, your system/ application data and settings, any downloaded applications and your DRM licence —might be lost in the process of updating your phone's software. Therefore, LG recommends that you back up your personal data before updating your phone's software. LG does not take responsibility for any loss of personal data.

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DivX HD

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that has passed rigorous testing to verity that it plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

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  To obtain the corresponding source code under GPL, LGPL, MPL and other open source licences, please visit http://opensource.lge.com. All referred licence terms, disclaimers and notices are available for download with the source code.

- Wi-Fi® and Wi-Fi Protected Access®are registered trademarks of the Wi-Fi Alliance.

Dolby Digital Plus

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Q&A

Please check to see if any problems you have encountered with the phone are described in this section before taking the phone in for a service or calling the Customer Service Center.

Q How do I view the list of outgoing calls, incoming calls and missed calls?

A Tap the **Phone Key** and tap the **Call logs** tab.

Q Why is the connection inconsistent or not audible in certain areas?

A When the frequency environment is unstable in a certain area, connection may be inconsistent and inaudible. Relocate to another area and try again.

Q Why is the connection inconsistent or abruptly disconnects even when established?

A When frequency is unstable or weak, or if there are too many users, a connection may be cut off even after it was established. Please try again later or attempt again after relocating to other areas.

Q Why does the phone heat up?

A The phone may get hot when there is a very long call duration, when games are played or even when surfing the Internet for a long time. This has no effect upon the life of the product or performance.

Q Why does the battery run out so quickly during normal use?

A This may be due to the user environment, a large number of calls or a weak signal.

Q Why is no number dialed when an Address Book entry is recalled?

A Check that the number has been stored correctly by using the Address book Search feature. Re-store them, if necessary.

Q The screen got frozen. How can I solve this problem?

A Press and hold the **Power/Lock Key** for 10 seconds to turn it off. Then press and hold the **Power/Lock Key** again for 1.5 seconds to reboot the phone.

Accessories

There are a variety of accessories available for your mobile phone, some of which may be sold separately. You can select these options according to your personal communication requirements. Visit your local AT&T store or www.att.com/wirelessaccessories for specific offerings.

NOTE

- Always use genuine LG accessories. Failure to do this may invalidate your warranty.
- Accessories may be different in different regions; please check with our regional service company or agent for further enquiries.

For Your Safety

Important Information

This user guide contains important information on the use and operation of this phone. Please read all the information carefully for optimal performance and to prevent any damage to or misuse of the phone. Any changes or modifications not expressly approved in this user guide could void your warranty for this equipment. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Before You Start

WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm. ***Wash hands after handling***.

Safety Instructions

WARNING! To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as the bathroom, swimming pool, etc.

Always store your phone away from heat. Never store your phone in settings that may expose it to temperatures less than 32°F or greater than 104°F, such as outside during extreme weather conditions or in your car on a hot day. Exposure to excessive cold or heat will result in malfunction, damage and/or catastrophic failure.

Be careful when using your phone near other electronic devices. RF emissions from your mobile phone may affect nearby in adequately shielded electronic equipment. You should consult with manufacturers of any personal medical devices such as pacemakers and hearing aides to determine if they are susceptible to interference from your mobile phone. Turn off your phone in a medical facility or at a gas station. Never place your phone in a microwave oven as this will cause the battery to explode.

IMPORTANT! Please read the TIA SAFETY INFORMATION before using your phone.

Safety Information

Read these simple guidelines. Breaking the rules may be dangerous or illegal. Further detailed information is given in

this user guide.

- Do not disassemble this unit. Take it to a qualified service technician when repair work is required.
- Keep away from electrical appliances such as TVs, radios, and personal computers.
- The unit should be kept away from heat sources such as radiators or cookers.
- Do not drop.
- Do not subject this unit to mechanical vibration or shock.
- The coating of the phone may be damaged if covered with wrap or vinyl wrapper.
- Use dry cloth to clean the exterior of the unit. (Do not use solvent such as benzene, thinner or alcohol.)
- Do not subject this unit to excessive smoke or dust.
- Do not keep the phone next to credit cards or transport tickets; it can affect the information on the magnetic strips.
- Do not tap the screen with a sharp object; otherwise, it may damage the phone.
- Do not expose the phone to liquid or moisture.
- Use the accessories like an earphone cautiously. Do not tap the antenna unnecessarily.

FCC RF Exposure Information

WARNING! Read this information before operating the phone.

In August 1996, the Federal Communications Commission (FCC) of the United States, with its action in Report and Order FCC 96-326, adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies.

The design of this phone complies with the FCC guidelines and these international standards.

CAUTION

Use only the supplied antenna. Use of unauthorized antennas or modifications could impair call quality, damage the phone, void your warranty and/or result in violation of FCC regulations. Do not use the phone with a damaged antenna. A damaged antenna could cause a minor skin burn. Contact your local dealer for a replacement antenna.

Body-worn Operation

This device was tested for typical body-worn operations with the back of the phone kept 0.39 inches (1cm) between the user's body and the back of the phone. To comply with FCC RF exposure requirements, a minimum separation distance of 0.39 inches (1cm) must be maintained between the user's body and the back of the phone. Third-party belt-clips, holsters, and similar accessories containing metallic components may not be used. Body-worn accessories that cannot maintain 0.39 inches (1cm) separation distance between the user's body and the back of the phone, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided.

Part 15.19 statement

This device complies with part15 of FCC rules.Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Part 15.105 statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will

not occur in a particular installation. If you experience interference with reception (e.g.,television), determine if this equipment is causing the harmful interference by turning the equipment off and then back on to see if the interference is affected. If necessary, try correcting the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Cautions for Battery

- Do not disassemble or open crush, bend or deform, puncture or shred.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.
- Only use the battery for the system for which it is specified.
- Only use the battery with a charging system that has been qualified with the system per CTIA Certification Requirements for Battery System Compliance to IEEE1725. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.
- Do not short circuit a battery or allow metallic conductive objects to contact battery terminals.
- Battery usage by children should be supervised.
- Avoid dropping the phone. If the phone is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.
- Improper battery use may result in a fire, explosion or other hazard.
- For those host devices that utilize a USB port as a charging source, the host device's user manual shall include a statement that the phone shall only be connected to products that bear

the USB-IF logo or have completed the USB-IF compliance program.

Adapter (Charger) Cautions

- Using the wrong battery charger could damage your phone and void your warranty.
- The adapter or battery charger is intended for indoor use only.

Do not expose the adapter or battery charger to direct sunlight or use it in places with high humidity, such as the bathroom.

Avoid damage to your hearing

- Damage to your hearing can occur if you are exposed to loud sound for long periods of time. We therefore recommend that you do not turn on or off the handset close to your ear. We also recommend that music and call volumes are set to a reasonable level.
- If you are listening to music while out and about, please ensure that the volume is at a reasonable level so that you are aware of your surroundings. This is particularly imperative when attempting to cross the street.

Wi-Fi Caution

This device is capable of operating in 802.11a/n/ac mode. For 802.11a/n/ac devices operating in the frequency range of 5.15 – 5.25 GHz, they are restricted for indoor operations to reduce any potential harmful interference for Mobile Satellite Services (MSS) in the US. Wi-Fi Access Points that are capable of allowing your device to operate in 802.11a/n/ac mode(5.15 – 5.25 GHz band) are optimized for indoor use only.

If your Wi-Fi network is capable of operating in this mode, please restrict your Wi-Fi use indoors to not violate federal regulations to protect Mobile Satellite Services.

TIA Safety Information

Provided herein is the complete TIA Safety Information for Wireless Handheld phones. Inclusion of the text covering Pacemakers, Hearing Aids, and Other Medical Devices is required in the owner's manual for CTIA Certification. Use of the remaining TIA language is encouraged when appropriate.

Exposure to Radio Frequency Signal

Your wireless handheld portable telephone is a lowpower radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992) *

NCRP Report 86 (1986)

ICNIRP (1996)

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

* American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

The design of your phone complies with the FCC guidelines (and those standards).

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Tips on Efficient Operation

For your phone to operate most efficiently: Don't touch the antenna unnecessarily when the phone is in use. Contact with

the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Driving

Check the laws and regulations on the use of wireless phones in the areas where you drive and always obey them. Also, if using your phone while driving, please observe the following:

- Give full attention to driving - driving safely is your first responsibility;
- Use hands-free operation, if available;
- Pull off the road and park before making or answering a call if driving conditions or the law require it.

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6') inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six (6) inches from their pacemaker when the phone is turned ON;
- Should not carry the phone in a breast pocket;
- Should use the ear opposite the pacemaker to minimize the potential for interference;
- Should turn the phone OFF immediately if there is any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult AT&T.

HAC

This phone has been tested and rated for use with hearing aids for some of the wireless technologies that it uses. However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids. It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or phone retailer.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Health Care Facilities

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may use equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle.

You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Turn your phone OFF before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a 'blasting areas or in areas posted: 'Turn off two-way radio'. Obey all signs and instructions.

Potentially Explosive Atmosphere

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, marked clearly. Potential areas may include: fueling areas (such as gasoline stations); below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Charger and Adapter Safety

- The charger and adapter are intended for indoor use only.

Battery Information and Care

- Always unplug the charger from the wall socket after the phone is fully charged to save unnecessary power consumption of the charger.
- Please read the manual of specified charger about charging method.
- Do not damage the power cord by

bending, twisting, or heating. Do not use the plug if it is loose as it may cause electric shock or fire.

- Do not place any heavy items on the power cord. Do not allow the power cord to be crimped as it may cause electric shock or fire.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it's dirty. When using the power plug, ensure that it's firmly connected. If not, it may cause excessive heat or fire. If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the phone. Always cover the receptacle when not in use.
- Recharge the battery after long periods of non-use to maximize battery life. Battery life will vary due to usage pattern and environmental conditions.
- Never store your phone in temperature less than -4°F or greater than 122°F. Charge the battery in range of 0°C ~ 45°C.
- Charging temperature range is regulated between 0°C and 45°C. Do not charge the battery out of recommended temperature range. Charging out of recommended range might cause the generating heat or serious damage of battery. And also, it might cause the deterioration of battery's characteristics and cycle life.
- Do not use or leave the battery under the blazing sun or in heated car by sunshine.The battery may generate heat, smoke or flame. And also, it might cause the deterioration of battery's characteristics or cycle life.
- The battery pack has protection circuit to avoid the danger. Do not use nearby the place where generates static electricity more than 100V which gives damage to the protection circuit. If the protection circuit were broken, the battery would generate smoke, rupture or flame.
- If the skin or cloth is smeared with liquid from the battery, wash with fresh water. It may cause the skin inflammation.

- Please take your phone to an authorized service center immediately if this occurs.
- Do not handle the phone with wet hands while it is being charged. It may cause an electric shock or seriously damage your phone.
- Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire.
- The charger and adapter are intended for indoor use only.
- Talking on your phone for a long period of time may reduce call quality due to heat generated during use.

Explosion, Shock, and Fire Hazards

- Do not put your phone in a place subject to excessive dust and keep the minimum required distance between the power cord and heat sources.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it is dirty.
- When using the power plug, ensure that it is firmly connected. If it is not, it may cause excessive heat or fire.
- If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the phone. Always cover the receptacle when not in use.
- Do not short-circuit the battery. Metallic articles such as a coin, paperclip or pen in your pocket or bag may short-circuit the + and – terminals of the battery (metal strips on the battery) upon moving. Short-circuit of the terminal may damage the battery and cause an explosion.

General Notice

- Using a damaged battery or placing a battery in your mouth may cause serious injury.
- Do not place items containing magnetic components such as a credit card, phone card, bank book or subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.

- Talking on your phone for a long period of time may reduce call quality due to heat generated during use.
- When the phone is not used for a long period time, store it in a safe place with the power cord unplugged.
- Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference to the phone.
- Do not use the phone if the antenna is damaged. If a damaged antenna contacts skin, it may cause a slight burn. Please contact an LG Authorized Service Center to replace the damaged antenna.
- Do not immerse your phone in water. If this happens, turn it off immediately and remove the battery. If the phone does not work, take it to an LG Authorized Service Center.
- Do not paint your phone.
- The data saved in your phone might be deleted due to careless use, repair of the phone, or upgrade of the software. Please backup your important phone numbers. (Ring tones, text messages, voice messages, pictures, and videos could also be deleted.) The manufacturer is not liable for damage due to the loss of data.
- When you use the phone in public places, set the ring tone to vibration so as not to disturb others.
- Do not turn your phone on or off when putting it in your ear.
- Your phone is an electronic device that generates heat during normal operation. Extremely prolonged, direct skin contact in the absence of adequate ventilation may result in discomfort or minor burns. Therefore, use care when handling your phone during or immediately after operation.

Caution: Avoid potential hearing loss.

Prolonged exposure to loud sounds (including music) is the most common cause of preventable hearing loss. Some scientific research suggests that using portable audio devices, such as portable music players and cellular telephones, at high volume settings for long durations may lead to permanent noise induced hearing loss. This includes the use of

headphones (including headsets, earbuds and Bluetooth® or other wireless devices).

Exposure to very loud sound has also been associated in some studies with tinnitus (a ringing in the ear), hypersensitivity to sound and distorted hearing. Individual susceptibility to noise-induced hearing loss and other potential hearing problems varies.

The amount of sound produced by a portable audio device varies depending on the nature of the sound, the device, the device settings and the headphones. You should follow some commonsense recommendations when using any portable audio device: **204 Safety**

- Set the volume in a quiet environment and select the lowest volume at which you can hear adequately.
- When using headphones, turn the volume down if you cannot hear the people speaking near you or if the person sitting next to you can hear what you are listening to.
- Do not turn the volume up to block out noisy surroundings. If you choose to listen to your portable device in a noisy environment, use noisecancelling headphones to block out background environmental noise.
- Limit the amount of time you listen. As the volume increases, less time is required before your hearing could be affected.
- Avoid using headphones after exposure to extremely loud noises, such as rock concerts, that might cause temporary hearing loss. Temporary hearing loss might cause unsafe volumes to sound normal.
- Do not listen at any volume that causes you discomfort. If you experience ringing in your ears, hear muffled speech or experience any temporary hearing difficulty after listening to your portable audio device, discontinue use and consult your doctor.

You can obtain additional information on this subject from the following sources: **Safety 205**

American Academy of Audiology 11730 Plaza American Drive, Suite 300

Reston, VA 20190

Voice: (800) 222-2336

Email: info@audiology.org

Internet: www.audiology.org

National Institute on Deafness and Other Communication

Disorders

National Institutes of Health

31 Center Drive, MSC 2320

Bethesda, MD USA 20892-2320

Voice: (301) 496-7243

Email: nidcdinfo@nih.gov

Internet: http://www.nidcd.nih.gov/health/hearing

National Institute for Occupational Safety and Health Hubert H. Humphrey Bldg.

200 Independence Ave., SW Washington, DC 20201 Voice: 1-800-35-NIOSH (1-800-356-4674)

Internet: http://www.cdc.gov/niosh/topics/noise/default.html

FDA Consumer Update

The U.S. Food and Drug Administration Center for Devices and Radiological Health Consumer Update on Mobile Phones.

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the Home screen. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

2. What is the FDA's role concerning the safety of wireless phones?

Under the law, the FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, the FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace, or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, the FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

The FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

The FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. The FCC relies on the FDA and other health agencies for safety questions about wireless phones.

The FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

3.What kinds of phones are the subject of this update?

The term 'wireless phone' refers here to handheld wireless phones with built-in antennas, often called 'cell', 'mobile', or 'PCS' phones. These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by FCC safety guidelines that were developed with the advice of the FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called 'cordless phones,' which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

4.What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wireless

phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

5. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time

of exposure to a cancer-causing agent and the time tumors develop - if they do- may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is the FDA doing to find out more about the possible health effects of wireless phone RF?

The FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radiofrequency energy (RF). The FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The project has also helped develop a series of public information documents on EMF issues. The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. The FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts with independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much radio frequency energy exposure I can get by using my wireless phone?

All phones sold in the United

States must comply with Federal Communications Commission (FCC) guidelines that limit radio frequency energy (RF) exposures. The FCC established these guidelines in consultation with the FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (http://www.fcc.gov/oet/rfsafety) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has the FDA done to measure the radio frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radio frequency energy (RF) exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, 'Recommended Practice for Determining the Spatial- Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques,' sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissuesimulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different

laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?

If there is a risk from these products - and at this point we do not know that there is - it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure. If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna. Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce

RF exposure. Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, the FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by the FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. The FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a 'compatible' phone and a 'compatible' hearing aid at the same time. This standard was approved by the IEEE in 2000. The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, the FDA will conduct testing to assess the

interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources:

FDA web page on wireless phones (http://www.fda.gov, click on "C" in the index and "Cell Phones")

Federal Communications Commission (FCC) RF Safety Program (http://www.fcc.gov/oet/rfsafety)

International Commission on Non-Ionizing Radiation Protection (http://www.icnirp.de)

World Health Organization (WHO) International EMF Project (http://www.who.int/emf)

National Radiological Protection Board (UK) (http://www.hpa.org.uk/radiation/)

10 Driver Safety Tips

Your wireless phone gives you the powerful ability to communicate by voice almost anywhere, anytime. An important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When operating a car, driving is your first responsibility.

When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.
2. When available, use a hands-free device. A number of hands-free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
3. Make sure you place your wireless

phone within easy reach and where you can reach it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voicemail answer it for you.

4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
5. Do not take notes or look up phone numbers while driving. If you are reading an Address Book or business card, or writing a "to-do" list while driving a car, you are not watching where you are going. It is common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip— dial only a few numbers, check the road and your mirrors, then continue.
7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix; they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations — with your phone at your side, help is only three numbers away. Dial 911 or other local emergency number in the case of fire,

traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 911 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you can still use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle. You know to be stolen, call roadside assistance or other special non-emergency wireless number. The above tips are meant as general guidelines. Before deciding to use your mobile device while operating a vehicle, it is recommended that you consult your applicable jurisdiction's local laws or other regulations regarding such use. Such laws or other regulations may prohibit or otherwise restrict the manner in which a driver may use his or her phone while operating a vehicle.

For more information, please call to 888-901-SAFE, or visit our website http://www.ctia.org.

Consumer Information on SAR (Specific Absorption Rate)

This model phone meets the government's requirements for exposure to radio waves.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish

permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg.* Tests for SAR are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. Because the phone is designed to operate at multiple power levels to use only the power required to reach the network, in general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this phone when tested for use at the ear is 0.52 W/kg and when worn on the body, as described in this user's manual, is 1.19 W/kg. (Body-worn measurements differ among phones models, depending upon available accessories and FCC requirements.) While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after

searching on FCC ID ZNFD950.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at http://www.ctia.org

* In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless Devices

On July 10, 2003, the U.S. Federal Communications Commission (FCC) Report and Order in WT Docket 01-309 modified the exception of wireless phones under the Hearing Aid Compatibility Act of 1988 (HAC Act) to require digital wireless phones be compatible with hearing-aids.

The intent of the HAC Act is to ensure reasonable access to telecommunications services for persons with hearing disabilities.

While some wireless phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

The wireless telephone industry has developed a rating system for wireless phones, to assist hearing device users to find phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated have the rating on their box or a label located on the box.

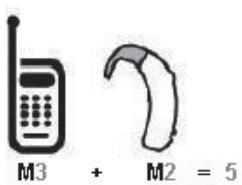
The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated phone successfully. Trying out the phone with your hearing device is the best way to evaluate it for your personal

needs.

M-Ratings: Phones rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Phones rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. T4 is the better/ higher of the two ratings.

Hearing devices may also be rated. Your hearing device manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise. The hearing aid and wireless phone rating values are then added together. A sum of 5 is considered acceptable for normal use. A sum of 6 is considered for best use.



In the above example, if a hearing aid meets the M2 level rating and the wireless phone meets the M3 level rating, the sum of the two values equal M5. This should provide the hearing aid user with "normal usage" while using their hearing aid with the particular wireless phone. "Normal usage" in this context is defined as a signal quality that's acceptable for normal operation.

The M mark is intended to be synonymous with the U mark. The T mark is intended to be synonymous with the UT mark. The M and T marks are recommended by the Alliance for Telecommunications Industries Solutions (ATIS). The U and UT marks are referenced in Section 20.19 of the FCC Rules. The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

When you're talking on a cell phone, it's recommended that you turn the BT (Bluetooth) mode off for HAC.

For information about hearing aids and digital wireless phones

Wireless Phones and Hearing Aid Accessibility

http://www.accesswireless.org/

Gallaudet University, RERC

http://tap.gallaudet.edu/Voice/

FCC Hearing Aid Compatibility and Volume Control

http://www.fcc.gov/cgb/dro/hearing.html

The Hearing Aid Compatibility FCC Order

http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-168A1.pdf

Hearing Loss Association of America [HLAA]

http://hearingloss.org/content/telephones-and-mobile-devices